

- (1992). Virtual Reality: Hearing Before the Subcommittee on Science, Technology, and Space of the Committee on Commerce, Science, and Transportation, and United States Senate, New Developments in Computer Technology, (pp. 102-553). Washington, DC: U. S. GPO.
- (1992, April). Imaging Technologies: A Different View. *Resources in Technology*. *Technology Teacher*, 51(7), 15-22.
- (1992, July 18). Groping at Atoms: Virtual Reality, 324, 87-89.
- (1993). ARX: Fax Architecture. *Architecture New York*, 1(3), 58.
- (1993). Electrotecture: Architecture and the Electronic Future. *Architecture New York*, 1(3), 44-53.
- (1993). Virtual Reality: Here Today, Real Tomorrow. *Technology Knowledge Activities*, 1(2), 19-27.
- (1994). Dave Warner, Neuroscientist: Evangelizing the Need to Bring Advanced VR Technologies to Medicine. *Virtual Reality World*, 2(6), 24-28.
- (1994). Micro Vision Seeking \$20 Million in Second Stage Placing. *VR News*, 3(3), 14-15.
- (1994). Survey of High Performance Image Generators: RTG's Staff Rounds Up the Machines That Make the Pictures in Real Time. *Computer Graphics*, 28(2), 115-117.
- (1994). Virtual Reality and Technologies for Combat Simulation (Document Number: Y 3.T 22/2:2 R 22; OTA Number: OTA-BP-ISS-136): Washington, DC: U. S. Government Printing Office, Office of Technology Assessment.
- (1994, January). Report on Virtual Vision. *Gadgetworld*, 1(1), 8.
- (1994, July). VR VC's. *The Red Herring*(12), 22-23.
- (1994, March). VR-386. *PCVR Magazine*(14), 37-40.
- (1994, March 28). It's Virtually Educational: Researcher Bill Winn Envisions VR as a Teaching Tool. *InformationWeek*, 36.
- (1995, March 11). Worlds Apart. *Economist*, 334(7905), 77.
- (1996). VR in industrial training. *VR News*, 5(9), 23-26.
- (1996). VR in education. *VR News*, 5(6), 31-34.
- (1997). Duracell adds virtual reality to increase flexibility and consistency of factory floor training. *I/S Analyzer*, 36(3), 13-16.
- (1997). Amoco's PC-based virtual reality simulation enables it to cut driver training costs. *I/S Analyzer*, 36(3), 2-7.
- (1997). Training's new dimension [virtual reality]. *AV Magazine for Business Communications*(303), 20-21.
- (1997). Virtual reality for the troops. *Image Processing*, 25-26.
- Abbott, R. J., Campbell, M. L., & Krenz, W. C. (1996). Scheduling Robotic Actions by Genetic Algorithms. *Presence: Teleoperators and Virtual Environments*, 5(2), 191-204.
- Accchione, N. S., & Psotka, J. (1993). Mach III: Past and Future Approaches to Intelligent Tutoring. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 344-351). : NASA.

Achorn, B., & Badler, N. (1993). A Virtual Training Environment with Simulated Agents. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 65-68). : NASA.

Ackerman, M. J. (1994). The Visible Human Project. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Robotics, (pp. 5-7). : Aligned Management Associates.

Ackerman, M. J., Spitzer, V. M., Scherzinger, A. L., & Whitlock, D. G. (1995). The Visible Human data set: an image resource for anatomical visualization. *Medinfo*, 8(2), 1195-1198.

Adachi, Y. (1993). Touch and Trace on the Free-Form Surface of Virtual Object. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 162-168). : IEEE Service Center.

Adachi, Y., Kumano, T., & Ogino, K. (1995). Intermediate Representation for Stiff Virtual Objects. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 203-210). : IEEE Computer Society Press.

Adam, J. A. (1993). Virtual Reality is for Real. *IEEE Spectrum*, 30, 22-29.

Adam, J. A. (1993 October). Virtual Reality. *IEEE Spectrum*, [special report: Virtual Reality], 30(10), 22-29.

Adam, E. C. (1994). Head-Up Displays versus Helmet-Mounted Displays: the Issues. In Proceedings of the Cockpit Displays, (pp. 13-21). : SPIE.

Adams, C. (1990, March). If Looks Could Kill: The Eyes Have It. *Military and Aerospace Electronics*, 35-37.

Adams, N., & Lang, L. (1995). VR improves Motorola training program. *AI Expert*, 10(5), 13-14.

Addison, R. (1995). DETOUR: Brain Deconstruction. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 1-3). Amsterdam: IOS Press.

Addison, R., Coffin, T., Ghazisaedy, M., Kenyon, R., Reynolds, W., Reitzer, J., Thiebax, M., Tamburrino, A., Verlo, A., Watson, M., Warner, D., & Gay, E. (1995). Synesthesia: Collaborative Biosignal Experience. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.

Addison, R. (1996). Virtual Reality: A New Way to Design Neuroperceptual Tools. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 716-717). Washington, DC: IOS Press.

Adelstein, B. D., & Ellis, S. R. (1993). Effect of Head-Slaved Visual Image Roll on Spatial Situation Awareness. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting Designing for Diversity, (pp. 1350-1354). : Human Factors Society.

Adelstein, B. D., Johnston, E. R., & Ellis, S. R. (1996). Dynamic Response of Electromagnetic Spatial Displacement Trackers. *Presence: Teleoperators and Virtual Environments*, 5(3), 302-318.

Adnan, S., & Cheatham, J. B. (1992). Testbed for remote telepresence research. In Proceedings of the Cooperative Intelligent Robotics in Space III, (pp. 393-400). : SPIE.

Agrawala, M., Beers, A. C., & Levoy, M. (1995). 3D Painting on Scanned Surfaces. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 145-150). : ACM.

Aharon, S., & Robb, R. A. (1996). 3-D Surface Reconstruction of Patient Specific Anatomic Data Using a Pre-Specified Number of Polygons. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 430-439). Washington, DC: IOS Press.

Ahlers, R. J., & Schmidberger, E. J. (1989). Three-Dimensional Image Analysis for Quality Inspection. In *Proceedings of the Automated Inspection and High Speed Vision Architectures II*, (pp. 63-68). : SPIE.

Ahlers, R. J., & Lu, J. (1990). Stereoscopic Vision: An Application Oriented Overview. In *Proceedings of the Optics, Illumination and Image Sensing for Machine Vision IV*, (pp. 298-308). : SPIE.

Ahmed, P., Al-Dhelan, A., & Shah, A. (1993). On the Construction of a Knowledge-Based Intelligent Tutoring System (KB-ITS). In *Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology*, (pp. 234). : NASA.

Ahuja, N. (1995). Feature Guided Pixel Matching and Segmentation in Motion Sequences. In *Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing*, (pp. 51-57). : ATR International.

Airey, J., Rohlf, J., & Brooks, F. P. (1990). Towards Image Realism with Interactive Update Rates in Complex Virtual Building Environments. In *Proceedings of the 1990 Symposium on Interactive 3D Graphics*, (pp. 41-50). :

Akamatsu, M. (1994). Touch with a Mouse: A Mouse Type Interface Device with Tactile and Force Display. In *Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication*, (pp. 140-144). : IEEE.

Akamatsu, M., Sato, S., & MacKenzie, I. S. (1994 Winter). Multimodal Mouse: A Mouse-Type Device with Tactile and Force Display. *Presence: Teleoperators and Virtual Environments*, 3(1), 73-80.

Akamatsu, M. (1996 July). Grasp an Object with Tactile and Force Feedback - Grasping Mouse. In *Proceedings of the ACM Symposium on Virtual Reality Software and Technology*, (pp. 75-76). : ACM.

Akins, A. S. (1992). Proceedings of the 7th Annual Conference, "Technology and Persons with Disabilities". In H. J. Murphy (Ed.), *Virtual Reality and the Physically Disabled: Speculations of the Future*, (pp. 7-10). Northridge, CA: CSUN.

Akins, A. S. (1994 March-April). Golfers Tee Off into the Future. *The Futurist: A Journal of Forecast, Trends, and Ideas about the Future*, 28(2), 39-42.

Akiyama, K., Tetsutani, N., Ishibashi, M., Ichinose, S., & Yasuda, H. (1991). Consideration on 3-Dimensional Visual Communication System. *IEEE Journal on Selected Areas in Communications*, 9(4), 550-560.

Akiyoshi, M., Miwa, S., Ueda, T., & Nishida, S. (1995). A learning environment for maintenance of power equipment using virtual reality. In *Proceedings of the Fifth International Conference on Image Processing and its Applications*, (pp. 331-335). : IEE.

Akiyoshi, M., Miwa, S., & Nishida, S. (1996). The application of virtual reality technology to maintenance task of substations. *Mitsubishi Denki Giho*, 70(6), 34-8.

Akka, R. (1992). Automatic Software Control of Display Parameters for Stereoscopic Graphics Images. In *Proceedings of the Stereoscopic Displays and Applications III*, (pp. 31-38). : SPIE.

- Akka, R. A. (1993). Utilizing 6D Head-Tracking for Stereoscopic Computer-Graphics Perspective Transformations. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 147-154). : SPIE.
- Akkiraju, N., Edelsbrunner, H., Fu, P., & Qian, J. (1996). Viewing Geometric Protein Structures from Inside a CAVE. *IEEE Computer Graphics and Applications*, 16(4), 58-61.
- Albe, F., & Smigelski, P. (1991). Stereoscopic Holographic Cinematography. In Proceedings of the 19th International Congress on High-Speed Photography and Photonics, (pp. 1098-1102). : SPIE.
- Albright, M. J., & Graf, D. L. (Eds.). (1992). *Teaching in the Information Age: The Role of Educational Technology*. San Francisco, CA: Jossey-Bass Higher and Adult Education Series.
- Aldridge, R. J., & Carr, K. (1996). Getting a Grasp on Virtual Reality. In Proceedings of the CHI '96: ACM Conference on Human Factors in Computing Systems, (pp. 229-230). : ACM.
- Alexander, G., & Beale, I. L. (1990). Comparison of Alternative Schedules for Producing Productive Workshop Behaviour in a Person with an Intellectual Handicap. *Australia and New Zealand Journal of Developmental Disabilities*, 16(1), 49-55.
- Alexander, J., & Long, M. (1995). Cyber Sports. *VR World*, 3(4), 12.
- Alexander, J., & Long, M. (1995). Nintendo's New Baby Boy. *VR World*, 3(3), 14.
- Alexander, J., Close, J., Galore, J., & Long, M. (1995). Welcome to the Next Level: VR Goes Mass Market in 1995. *VR World*, 3(3), 17-21.
- Alexander, J., Close, J., Galore, J., & Long, M. (1995). Welcome to the Next Level: Part II. *VR World*. *VR World*, 3(4), 86-88.
- Alexander, J., & Long, M. (1995 May/June). Nintendo's New Baby Boy. *VR World*, 3(3), 14.
- Alger, I., & Durlach, N. I. (1996). Virtual Reality and Mental Health: Abstracts. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 713-730). Washington, DC: IOS Press.
- Alger, I. (1996). Virtual Reality and Mental Health. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 714-715). Washington, DC: IOS Press.
- Aliaga, D. G. (1994). Virtual and Real Object Collisions in a Merged Environment. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 287-298). : World Scientific Publishing Co., Inc.
- Allen, J., & Kleppner, D. (1990). RLE Progress Report Number 133 (Reannouncement with New Availability Information) (133): Cambridge, MA: Massachusetts Institute of Technology.
- Allen, D. W. (1993). A 1' High Resolution Field Sequential Display for Head Mounted Applications. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium: VRAIS '93, (pp. 364-370). : IEEE Service Center.
- Allen, C. (1996). *Virtual Identities: The Social Construction of Cybered Selves*. Unpublished Ph.D. Dissertation, Evanston, IL: Northwestern University.

Allison, D., Wills, B., & Hodges, L. F. (1997). Gorillas in the Bits [poster paper]. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 69). : IEEE Computer Society Press.

Allotta, A., & Bergamasco, M. (1994). The Range of Wrenches that Can be Exerted by a Force Replication Device. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 246-250). : IEEE.

Allport, G. (1991). Three Dimensional Navigation Using the Five Senses. In Proceedings of the IEEE Colloquium on Real World Visualization - Virtual World - Virtual Reality, (pp. 1-3). : IEEE.

Alluisi, E. A. (1990). Network and Virtual-World Technologies for Training. In Proceedings of the 34th Annual Proceedings of the Human Factors Society, (pp. 1405-1406). : Human Factors Society, Inc.

Alluisi, E. A. (1991 June). The Development of Technology for Collective Training: SIMNET, a Case History. *Human Factors*, 33(3), 343-362.

Alspaugh, J. C. (1992). A Short Guide to AutoCad Drawing Primitives for 3D Computer Graphics Models and the Walkthrough Auto-CAD-to-Polygon Conversion Program (TR92-019): Dept. of Computer Science, University of North Carolina.

Altmann, C., Kittel, I., & Kimura, F. (1994). Estimation of Production Costs Using Virtual Monitoring: A Conceptual Framework. *Journal of Design and Manufacturing*, 4(3), 187-194.

Amano, K., Matsushita, F., Yanagawa, H., Cohen, M., Herder, J., Koba, Y., & Tohyama, M. (1996). PSFC: the Pioneer Sound Field Control System. In Proceedings of the RO-MAN '96: IEEE International Workshop on Robot and Human Communication, (pp. 495-499). : IEEE.

Amari, H., Nagumo, T., Okada, M., Hirose, M., & Ishii, T. (1993). A Virtual Reality Application for Software Visualization. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium: VRAIS '93, (pp. 1-6). : IEEE Service Center.

Amburn, P. (1992). A Virtual Environment Design for Battle Staff Planning, Mission Planning and Mission Rehearsal. In Proceedings of the 1992 IMAGE Conference VI, (pp. 89-98). : IMAGE Society.

Amburn, P., & Marshak, W. P. (1996). Design and evaluation of an air-to-air combat debriefing system using a head-mounted display. In Proceedings of the IEEE 1996 Virtual Reality Annual International Symposium, (pp. 131-138). : IEEE Computer Society Press.

Amselem, D. (1995). A Window on Shared Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 4(2), 130-145.

Anderson, A. (1991, September 6). Video-Tunneling to School. *Science*, 253(5024), 1090.

Anderson, D. B., Barrus, J. W., Howard, J. H., Rich, C., Shen, C., & Waters, R. C. (1995). Building Multi-User Interactive Multimedia Environments at MERL (Technical Report TR95-17): Mitsubishi Electric Research Laboratories.

Andersson, R. L. (1993). A Real Experiment in Virtual Environments: A Virtual Batting Cage. *Presence: Teleoperators and Virtual Environments*, 2(1), 16-33.

Andresen, H., & Wapler, M. (1995). DIGIHOM® - the Digital Man. In Proceedings of the Virtual Reality World '95, (pp. 153-158). : IDG Conferences and Seminars.

Andrews, D. H. (1993). Warfighting Training RD in the Post Cold War Era-- With a Special Emphasis on Synthetic Environments (PC A02/MF A01): AZ: Williams Air Force Base, Armstrong Lab.

Andrews, I., & Ellis, S. (1994). Bringing Virtual Worlds to Life. *AI Expert*, 9(5), 15-17.

Andrews, D. H. (1994). Warfighting Training RD in the Post Cold War Era-- With a Special Emphasis on Synthetic Environments [Final technical report] (PC A02/MF A01): Brooks AFB, TX: Armstrong Lab.

Andrews, D. H., Carroll, L. A., & Bell, H. H. (1995). The future of selective fidelity in training devices. *Educational Technology*, 35(6), 32-36.

Andrews, D. H., Edwards, B. J., Mattoon, J. S., & Thurman, R. A. (1996). Potential modeling and simulation contributions to specialized undergraduate pilot training. *Educational Technology*, 36(4), 6-17.

Angster, S. R. (1996). VEDAM - Virtual Environments for Design and Manufacturing. Unpublished Doctoral Dissertation, Washington State University.

Angster, S., & Jayaram, S. (1996). Open Architecture Framework for Integrated Virtual Product Development Systems. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 84-95). : Queen Mary & Westfield College.

Angus, I. G., & Sowizral, H. A. (1996 May). VRMosaic: Web Access from within a Virtual Environment. *IEEE Computer Graphics and Applications*, 16(3), 6-10.

Anogianakis, G., Apostolakis, M., Harding, G. F. A., Krotopoulou, K., Nendidis, G., Psaltikidou, M., Spyrokis, P., Terpou, D., & Tsakalidis, A. (1995). MAGNOBRAIN: Integrating Radiological, Anatomical, and Electrophysiological Information about the Brain for Source Localization. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 4-14). Amsterdam: IOS Press.

Anogianakis, G., & Maglavera, S. (1996). Medical Emergency Aid through Telematics (MERMAID). In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 255-264). Washington, DC: IOS Press.

Anogianakis, G., & Maglavera, S. (1996). MERMAID 1996 - Report on the Implementation of a European Project on "Medical Emergency Aid through Telematics". In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 264-270). Washington, DC: IOS Press.

Anogianakis, G., & Maglavera, S. (1996). Transeuropean Network for the Provision of Added Value Services in Telemedicine - (VAST-NET). In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 298-306). Washington, DC: IOS Press.

Antonoff, M. (1992, August). Virtual Acoustics. *Popular Science*, 37.

Antonoff, M. (1993, June). Living in a Virtual World. *Popular Science*, 82-86, 124-125.

Anzai, Y., Black, K., Hamilton, R., Huang, A., Farahani, K., Sinha, U., Sinha, S., DeSalles, A., Castro, D., & Lufkin, R. (1994). Virtual Reality Meets Interventional MRI: Battle of the Oxymorons. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 128-130). : Aligned Management Associates.

- Aoki, S., Cohen, M., & Koizumi, N. (1994 Winter). Design and Control of Shared Conferencing Environments for Audio Telecommunication Using Individually Measured HRTF's. *Presence: Teleoperators and Virtual Environments*, 3(1), 60-72.
- Apostolos, M. K., Zak, H., Das, H., & Schenker, P. S. (1992). Multisensory Feedback in Advanced Teleoperations: Benefits of Auditory Cues. In Proceedings of the Sensor Fusion V, (pp. 98-105). : SPIE.
- Apostolos, M. K. (1992). Robot Choreography: Kinesthetic Creativity at the Mind-Metal Interface. *Presence: Teleoperators and Virtual Environments*, 1(1), 149-150.
- Appino, P. A., Lewis, J. B., Koved, L., Ling, D. T., Rabenhorst, D. A., & Codella, C. F. (1992). An Architecture for Virtual Worlds. *Presence: Teleoperators and Virtual Environments*, 1(1), 1-17.
- Applewhite, H. L. (1991). Position Tracking in Virtual Reality (91-04): Piltdown, Inc.
- Applewhite, H. L. (1992). Position Tracking in Virtual Reality. In Proceedings of the Virtual Reality '93. Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 1-8). : Meckler.
- Applewhite, H. L. (1993). Acoustic Positioning Systems. *Virtual Reality Systems*, 1(1), 26-30.
- Applewhite, H. L. (1993 March). Acoustic Positioning Systems. *Virtual Reality Systems*, 1(1), 26-30.
- Applewhite, H. L. (1994). A New Ultrasonic Positioning Principle Yielding Pseudo-Absolute Location. In Proceedings of the VRST '94 - Virtual Reality Software and Technology, (pp. 175-184). : World Scientific Publishing Co.
- Apuzzo, M. L. (1996). The Richard C. Schneider Lecture. New dimensions of neurosurgery in the realm of high technology: possibilities, practicalities, realities. *Neurosurgery*, 38(4), 625-637.
- Arai, F., Fukuda, T., Yamamoto, Y., Naito, T., & Matsui, T. (1993). Interactive Adaptive Interface Using Recursive Fuzzy Reasoning. In Proceedings of the Virtual Reality Annual International Symposium - VRAIS '93, (pp. 104-110). : IEEE Computer Society Press.
- Arai, F., Ito, M., Fukuda, T., Negoro, M., & Naito, T. (1995). Intelligent Assistance for Intravascular Tele-Surgery and Experiments on Virtual Simulator. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 101-109). : IEEE Computer Society Press.
- Arai, F., Tanimoto, M., Fukuda, T., Shimojima, K., Matsuura, H., & Negoro, M. (1996). Distributed Virtual Environment for Intravascular Tele-Surgery Using Multimedia Telecommunication. In Proceedings of the Virtual Reality Annual International Symposium: VRAIS '96, (pp. 79-86). : IEEE Computer Society Press.
- Arikawa, M., Amano, A., Maeda, K., Aibara, R., Shimojo, S., Nakamura, Y., Hiraki, K., Nishimura, K., & Terauchi, M. (1996). Dynamic LoD for QoS Management in the Next Generation VRML. In Proceedings of the International Conference on Multimedia Computing and Systems, (pp. 24-27). : IEEE Computer Society Press.
- Ariyaeenia, A. M. (1990). The Design and Performance of Stereoscopic Television Systems. In Proceedings of the Mobile Robots IV, (pp. 362-370). : SPIE.

Armstrong, W. P., & Burton, R. P. (1990). Perspective and Stereo for Projection From and Display of Four Dimensions. In Proceedings of the Stereoscopic Displays and Applications, (pp. 54-61). : SPIE.

Arnaldi, N., Cozot, R., & Donikian, S. (1995). Simulating Automated Cars in a Virtual Urban Environment. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 171-184). New York, NY: SpringerWien.

ArsElectronica. (1995). Center Stepping towards the Info-Age. In Proceedings of the Virtual Reality World '95, (pp. 239-242). : IDG Conferences and Seminars.

Arthur, C. (1992, May 23). Virtual Reality: Did Reality Move For You? *New Scientist*, 22-27.

Arthur, E. J., Hancock, P. A., & Chrysler, S. T. (1993). Spatial Orientation in Real and Virtual Worlds. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting Designing for Diversity, (pp. 328-332). : Human Factors Society.

Arthur, E., Hancock, P., & Telke, S. (1996). Navigation in virtual environments. In Proceedings of the High-Fidelity Simulation for Training, Test Support, Mission Rehearsal, and Civilian Applications, (pp. 77-85). : SPIE.

Asano, T., Yano, H., & Iwata, H. (1996). Basic Technology of Simulation System for Laparoscopic Surgery in Virtual Environment with Force Display. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 207-215). Washington, DC: IOS Press.

Asch, T. (1992). Photorealistic VR on the Desktop. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 1-3). : Meckler Publishing.

Asch, T. (1992). Designing Virtual Worlds. *AI Expert*, 7(8), 22-35.

Asch, T. (1993, July). Designing Virtual Worlds. *AI Expert [Virtual Reality '93 Special Report]*, 19-32.

Asch, T. (1994). CyberTron: First Permanent Immersive VR Systems Installed at Disney World. *Virtual Reality World*, 2(3), 18-20.

Ashford, J. (1992, October). Reaching for 3-D. *MacUser*, 221-223.

Askew, R. S., & Diftler, M. A. (1993). Ground Control Testbed for Space Station Freedom Robot Manipulators. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium: VRAIS '93, (pp. 69-75). : IEEE Service Center.

Associates, A. M. (1992). *Medicine Meets Virtual Reality: Discovering Applications for 3-D Multi-Media Interactive Technology in the Health Sciences*. San Diego, CA: Aligned Management Assoc.

Asteasu, C., Maiora, K., & Etxaniz, J. (1994). Three-dimensional World Model Building and Imaging System Based on A Priori Knowledge. *Computers in Industry*, 24, 39-54.

Astheimer, P. (1993). What you See is What you Hear. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 100-107). : IEEE Computer Society Press.

Astheimer, P., Felger, W., & Muller, S. (1993 November/December). Virtual Design: A Generic VR System for Industrial Applications. *Computers and Graphics*, 17(6), 671-677.

Astheimer, P., & Pierce, M.-L. (1994). Level-of-Detail Generation and Its Applications in Virtual Reality. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 299-312). : World Scientific Publishing Co., Inc.

Astheimer, P., Dai, F., Felger, W., Göbel, M., Haase, H., Muller, S., & Ziegler, R. (1995). VirtualDesign II - an Advanced VR System for Industrial Applications. In Proceedings of the Virtual Reality World '95, (pp. 337-364). : IDG Conferences and Seminars.

Astheimer, P., & Felger, W. (1995). An Interactive Virtual World Experience - the Cyberspace Roadshow. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 199-210, 301-302). New York, NY: SpringerWien.

Astheimer, P., & Göbel, M. (1995). Virtual Design II - an Advanced VR Development Environment. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 247-272). New York, NY: SpringerWien.

Astheimer, P., & Knopfle, C. (1996). 3-D Morphing and its Application to Virtual Reality. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 85-93). : SpringerWien.

Attree, E. A., Brooks, B. M., Rose, F. D., Andrews, T. K., Leadbetter, A. G., & Clifford, B. R. (1996). Memory processes and virtual environments: I can't remember what was there, but I can remember how I got there: Implications for people with disabilities. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.

Aukstakalnis, S., & Blatner, D. (1992). *Silicon Mirage: The Art and Science of Virtual Reality*. Berkeley, CA: Peachpit Press.

Aukstakalnis, S. (1993). Go With the Flow: Visualizing Complex Waterway Designs with Virtual Reality. CADalyst, 10(8), 56-58.

Aukstakalnis, S. (1993). Out of This World: the Fundamentals of Immersive Virtual Reality. CADalyst, 10(8), 37-44.

Aukstakalnis, S. (1993). Too Hot to Handle: Using CAD, Virtual Reality and Telepresence to Manage Nuclear Waste. CADalyst, 10(8), 46-50.

Aukstakalnis, S., Couvillion, B., Gaither, K., Moorhead, R., Nations, S., Vickery, R., Flynn, P., Fox, D. N., Smedstad, O. M., Wallcraft, A., & Williams, D. (1995). Interactive Ocean Modeling and Visualization. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.

Auld, L. W. S., & Pantellidis, V. S. (1994). Exploring virtual reality for classroom use: The Virtual Reality and Education Lab at East Carolina University. Tech Trends, 39(2), 29-31.

Aviles, W. A. (1990 March). Telerobotic Remote Presence. In Proceedings of the Human-Machine Interfaces for Teleoperators and Virtual Environments, (pp. 38). : NTIS.

Avis, N., & Macredie, R. (1994). Problems, Possibilities and Potential (Virtual Reality). Computer Bulletin, 6(5), 8-9.

Axling, T., Haridi, S., & Fahlen, L. (1996). Virtual Reality Programming in Oz. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 31-40). : SpringerWien.

Axling, T. (1996). Collaborative Interactive Design in Virtual Environments. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

- Ayers, M., & Zelenik, R. (1996). The Lego Interface Toolkit. In Proceedings of the UIST '96: the Ninth Annual ACM Symposium on User Interface Software and Technology, (pp. 97-98). : ACM SIGGRAPH.
- Azuma, R. (1993). Tracking Requirements for Augmented Reality. *Communications of the ACM*, 36(7), 50-51.
- Azuma, R., & Bishop, G. (1994). Improving Static and Dynamic Registration in an Optical See-Through HMD. In Proceedings of the SIGGRAPH '94, (pp. 197-204). : ACM SIGGRAPH.
- Azuma, R., & Bishop, G. (1995). A Frequency-Domain Analysis of Head-Motion Prediction. In Proceedings of the SIGGRAPH '95, (pp. 401-408). : ACM.
- Azuma, R. T. (1995 February). Predictive Tracking for Augmented Reality (TR95-007): University of North Carolina.
- Azuola, R., Kaye, J. M., & Ting, B. J. (1994). Infrastructure for Human Modeling in VR. *Virtual Reality Systems*, 1(3), 28-32.
- Backes, P. G., & Long, M. K. (1992). Local Remote Telerobotics for Underwater Vehicles. In Proceedings of the 1992 Symposium on Autonomous Underwater Vehicle Technology: AV'92, (pp. 11-15). : IEEE.
- Backman, D., Jacobson, S., Iverson, E., Davis, C., & Biggers, K. (1990). Issues in the Design of HIgh Dexterity, Force Reflective Teleoperators. In Proceedings of the Human-Machine Interfaces for Teleoperators and Virtual Environments, (pp. 39). : NTIS.
- Bacon, D. K. (1995). Integration of a Submarine into NPSNET. Unpublished Masters, Naval Postgraduate School, Monterey, California.
- Badler, N. I. (1988). JACK: a Toolkit for Manipulating Articulated Figures. In Proceedings of the ACM SIGGRAPH Symposium on User Interface Software, (pp. 221-229). : ACM.
- Badler, N. I. (1993). Graphical Behaviors and Animated Agents. In Proceedings of the Eurographics '93, (pp. C: 513). : North-Holland.
- Badler, N. I., Hollick, M. J., & Granieri, J. P. (1993). Real-Time Control of a Virtual Human Using Minimal Sensors. *Presence: Teleoperators and Virtual Environments*, 1(1), 82-86.
- Badler, N. I., Phillips, C. B., & Webber, B. L. (1993). *Virtual Humans and Simulated Agents*. New York, NY: Oxford University Press.
- Badler, N. I. (1995 May). A Workshop on Standards for Facial Animation. *Computer Graphics* [Special Issue: Modular Visualization Environments (MVEs)], 66-68.
- Badler, N. I., Metaxas, D., Webber, B., & Steedman, M. (1995 Winter). The Center for Human Modeling and Simulation. *Presence: Teleoperators and Virtual Environments*, 4(1), 81-96.
- Badler, N. I., Clarke, J. R., Hollick, M. J., Kokkevis, E., Metaxas, D. N., Bindiganavale, R., Webber, B. L., Chi, D. M., Foster, N., Ogunyemi, O., & Kaye, J. (1996). MediSim: simulated medical corpsmen and casualties for medical forces planning and training. In Proceedings of the National Forum: Military Telemedicine On-Line Today Research, Practice, and Opportunities, (pp. 21-28). : IEEE Computer Society Press.
- Baer, L. (1996). A Telephone Interface for Simulated Behavior Therapy of an Anxiety Disorder. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 718-719). Washington, DC: IOS Press.

- Bagiana, F., & Mills, S. (1993). Virtual Reality for European Space Programmes. In Proceedings of the VR '93 Virtual Reality International 93 - The Third Annual Conference on Virtual Reality, (pp. 138-143). : Meckler.
- Bagiana, F. (1993 November/December). Tomorrow's Space: Journey to the Virtual Worlds. *Computers and graphics*, 17(6), 687-690.
- Bagnall, P., Selcon, S., & Wright, P. (1993). Simulation Study of the Effects of Night Vision Goggles on Depth Perception [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.
- Bailey, R. W., Imbmbo, A. L., & Zucker, K. A. (1991). Establishment of a Laparoscopic Cholecystectomy Training Program. *The American Surgeon*, 57(4), 231-236.
- Bailey, S. S. (1994). Creating a Virtual Reality as a Perceptual Equivalence for Training. *EMI: Educational Media International*, 31(4), 221-223.
- Bailey, J. H., & Witmer, B. G. (1994). Learning and Transfer of Spatial Knowledge in a Virtual Environment. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 1158-1162). : Human Factors and Ergonomics Society.
- Bajaj, C. L., & Bernardini, F. (1995). Distributed and Collaborative Synthetic Environments (Technical Report 95-059): Purdue University, Department of Computer Sciences.
- Bajura, M., Fuchs, H., & Ohbuchi, R. (1992). Merging Virtual Objects with the Real World. In Proceedings of the SIGGRAPH 1992, (pp. 203-210). : ACM SIGGRAPH.
- Bajura, M., & Neumann, U. (1995). Dynamic Registration Correction in Augmented-Reality Systems. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 189-197). : IEEE Computer Society Press.
- Bajura, M., & Neumann, U. (1995 September). Dynamic Registration Correction in Video-Based Augmented Reality Systems. *IEEE Computer Graphics and Applications*, 15(5), 52-61.
- Baker, H. (1992). Tools for Analyzing Variation in Foot Tissue Structure. In Proceedings of the 1992 IMAGE Conference VI, (pp. 275-282). : IMAGE Society.
- Baker, J. P. (1994). Virtual Reality Tracking System (94-12): Department of Robotics and Digital Technology, Monash University.
- Balaguer, J. F., & Mangili, A. (1991). Virtual Environments. In D. Thalmann & N. Magnenat-Thalmann (Eds.), *New Trends in Animation and Visualization*, (pp. 91-105). New York, NY: John Wiley.
- Balaguer, J. F., & Neugebauer, J. (1993). The virtual reality demonstration centre. *Computers and Graphics*, 17(6), 627-631.
- Balaguer, J. F., & Gobbetti, E. (1993). Virtuality Builder II: On the Topic of 3D Interaction. In D. Thalmann & N. Magnenat-Thalmann (Eds.), *Virtual Reality and Multimedia*, (pp. 99-112). New York, NY: John Wiley and Sons.
- Balaguer, J. F., & Gobbetti, E. (1996). i3D: A High-Speed 3D Web Browser. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium '96, (pp. 69-76). : ABM.
- Balaguer, J.-F. (1996). VRML for LHC Engineering. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 159-168). : SpringerWien.

- Balaguer, J.-F., & de Gennaro, S. (1996). VENUS: A Virtual Reality Project at CERN. *Computer Graphics [Focus: "Real" Virtual Reality]*, 30(4), 40-43.
- Balaguer, J. F., & Gobbetti, E. (1996 August). 3D User Interfaces for General-Purpose 3D Animation. *Computer*, 29(8), 71-78.
- Balbo, S., Coutaz, J., & Salber, D. (1993). Towards Automatic Evaluation of Multimodal User Interfaces. In Proceedings of the 1993 International Workshop on Intelligent User Interfaces, (pp. 201-208). : ACM Press.
- Balch, D. C. (1995). Telemedicine in Rural North Carolina. In R. M. Satava, K. Morgan, & H. B. Sieburg (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 15-20). Amsterdam: IOS Press.
- Balch, D. C., & Tichenor, J. M. (1997). Telemedicine expanding the scope of health care information. *Journal of the American Medical Informatics Association*, 4(1), 1-5.
- Ballard, R. D. (1992, October). The JASON Project: Hi-Tech Exploration Promotes Students' Interest in Science. *T. H. E. Journal*, 20(4), 70-74.
- Ballas, J. A. (1994). Delivery of Information Through Sound. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 79-95). : Addison-Wesley Publishing Company.
- Balzarotti, G., Fiori, L., & Malfagia, R. (1994). Presentation of IR pictures on helmet mounted displays. In Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements, (pp. 51-62). : SPIE.
- Bangay, S. (1993). Parallel implementation of a virtual reality system on a transputer architecture. Unpublished Masters of Science, Department of Computer Science, Rhodes University.
- Banks, D. C., & Kelly, M. (1995). Tracking a Turbulent Spot in an Immersive Environment. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 170-172). : ACM.
- Bannwart, E. (1995). Cyber City. In Proceedings of the Virtual Reality World '95, (pp. 133-136). : IDG Conferences and Seminars.
- Barfield, W., Lim, R., & Rosenberg, C. (1990). Visual Enhancements and Geometric Field of View as Factors in the Design of a Three-Dimensional Perspective Display. In Proceedings of the Human Factors Society 34th Annual Meeting, (pp. 1470-1473). : Human Factors Society.
- Barfield, W., Rosenberg, C., & Kraft, C. (1990 October). Relationship between Scene Complexity and Perceptual Performance for Computer Graphics Simulations. *Displays*, 179-185.
- Barfield, W., & Weghorst, S. (1993). The Sense of Presence within Virtual Environments: A Conceptual Framework. In G. Salvendy & M. J. Smith (Eds.), *Human - Computer Interaction: Software and Hardware Interfaces*, (pp. 699-704). New York, NY: Elsevier.
- Barfield, W., Rosenberg, C., Han, S. H., & Furness, T. A. (1993). Spatial Situational Awareness as a Function of Frame of Reference. In Proceedings of the Society for Information Display, 1993 International Symposium, (pp. 107-113). : Society for Information Display.

Barfield, W., & Hendrix, C. (1995). Factors Affecting Presence and Performance in Virtual Environments. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 21-28). Amsterdam: IOS Press.

Barfield, W., & Furness, T. (Eds.). (1995). *Virtual Environments and Advanced Interface Design*. Oxford, UK: Oxford University Press.

Barfield, W., Hendrix, C., Bjorneseth, O., Kaczmarek, K. A., & Lotens, W. (1995). Comparison of Human Sensory Capabilities with Technical Specifications of Virtual Environment Equipment. *Presence: Teleoperators and Virtual Environments*, 4(4), 329-356.

Barfield, W., Rosenberg, C., & Lotens, W. A. (1995). Augmented-Reality Displays. In T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 542-576). New York, NY: Oxford University Press.

Barfield, W., Zeltzer, D., Sheridan, T., & Slater, M. (1995). Presence and Performance within Virtual Environments. In I. T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 473-513). New York, NY: Oxford University Press.

Barfield, W., Hendrix, C., & Bjorneseth, O. (1995). Spatial Performance with Perspective Displays as a Function of Computer Graphics Eyepoint Elevation and Geometric Field of View. *Applied Ergonomics*, 26(5), 307-315.

Barfield, W., Rosenberg, C., & Furness, T. A. (1995). Situational Awareness as a Function of Frame of Reference, Computer-Graphics Eyepoint Elevation, and Geometric Field of View. *International Journal of Aviation Psychology*, 5(3), 233-256.

Barfield, W., & Rosenberg, C. (1995). Judgments of Azimuth and Elevation as a Function of Monoscopic and Binocular Depth Cues Using a Perspective Display. *Human Factors*, 37(1), 173.

Barfield, W., & Danas, E. (1995). Comments on the use of olfactory displays for virtual environments. *Presence: Teleoperators and Virtual Environments*, 5(1), 109-121.

Barfield, W., Hendrix, C., & Brystrom, K. (1997). Visualizing the Structure of Virtual Objects Using Head Tracked

Stereoscopic Displays. In *Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium*, (pp. 114-120). : IEEE Computer Society Press.

Barfield, W., Cohen, M., & Rosenberg, C. (1997). Visual and auditory localization as a function of azimuth and elevation. *International Journal of Aviation Psychology*, 7(2), 123-138.

Bargar, R. (1994). Pattern and Reference in Auditory Display. In *Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces*, (pp. 151-166). : Addison-Wesley Publishing Company.

Barker, Q. (1994). Virtual Reality Market Analysis. *Virtual Reality World*, 2(2), 55-64.

Barker, P. (1994). Use of a virtual laboratory for teaching instrument design. In *Proceedings of the IEE Colloquium on 'Computer-Based Learning in Engineering'*, (pp. 5/1-5/5). : IEE.

Barker, V. L. (1996). Virtual Reality: From the Development Laboratory to the Classroom. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.),

Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 539-542). Washington, DC: IOS Press.

Barrance, P., Genda, E., Iwasaki, N., Kato, S., & Faust, A. (1996). Virtual Reality (VR) Techniques in Orthopaedic Research and Practice. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 107-114). Washington, DC: IOS Press.

Barrett, R., Maglio, P. P., & Kellem, D. C. (1997). How to Personalize the Web. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 75-82). : ACM, Inc.

Barrus, J. W. (1993). The Virtual Workshop: A Simulated Environment for Mechanical Design. , Cambridge, MA: Massachusetts Institute of Technology, Dept. of Mech. Eng.

Barrus, J. W., Waters, R. C., & Anderson, D. B. (1995). Locales and Beacons: Precise and Efficient Support For Large Multi-User Virtual Environments (Technical Report TR95-16): Mitsubishi Electric Research Laboratories.

Barrus, J. W., Waters, R. C., & Anderson, D. B. (1996). Locales and Beacons: Efficient and Precise Support for Large Multi-User Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 204-214). : IEEE Computer Society Press.

Barrus, J. W., Waters, R. C., & Anderson, D. B. (1996). Locales: Supporting Large Multiuser Virtual Environments. IEEE Computer Graphics and Applications, 16(6), 50-57.

Barry, P., Dockery, J., Littman, D., & Barry, M. (1994 summer). Intelligent Assistive Technologies. Presence: Teleoperators and Virtual Environments, 3(3), 208-215.

Bartlett, C. T. (1994). The Head-Up Display for the Advanced Cockpit. In Proceedings of the Cockpit Displays, (pp. 22-23). : SPIE.

Bash, P. A., Cruz-Neira, C., Kohlmeyer, B. D., Westerhoff, J., & Park, K. (1995). Virtual Biomolecular Environment (VIBE) on the Information Superhighway. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.

Bass, L., Kasabach, C., Martin, R., Siewiorek, D., Smailagic, A., & Stivoric, J. (1997). The Design of a Wearable Computer. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 139-146). : ACM, Inc.

Bates, J. (1992). Virtual Reality, Art, and Entertainment. Presence: Teleoperators and Virtual Environments, 1(1), 133-138.

Batson, T. (1993). ENFI research (Electronic Networks for Interaction). Computers and Composition, 10(3), 93-101.

Batson, T. (1993). The origins of ENFI. In B. Bruce, J. Peyton, & T. Batson (Eds.), Network-Based Classrooms, (pp. unpaginated). New York, NY: Cambridge University Press.

Baudel, T., & Beaudouin-Lafon, M. (1993 July). CHARADE: Remote Control of Objects using Free-Hand Gestures. Communications of the ACM, 36(7), 28-35.

Baudisch, P. (1996). The Cage: Efficient Construction in 3D using a Cubic Adaptive Grid. In Proceedings of the UIST '96: the Ninth Annual ACM Symposium on User Interface Software and Technology, (pp. 171-172). : ACM SIGGRAPH.

Bauer, C. (1995). Virtual Reality in the German Speaking Area and the Consideration of the European Circumstances. In Proceedings of the Virtual Reality World '95, (pp. 21-30). : IDG Conferences and Seminars.

Bauer, W., Breining, R., & Riedel, O. (1995). Using a Dataglove for the Ergonomic Assessment of Instruments in Endoscopy. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 29-36). Amsterdam: IOS Press.

Bauer, W., Breining, R., & Robler, A. (1995). Co-operative, Virtual Planning and Design. In Proceedings of the Virtual Reality World '95, (pp. 213-226). : IDG Conferences and Seminars.

Bauer, W., Bullinger, H. J., Hunkenjann, A., & Riedel, O. (1995). Planning of Orthopaedic Surgery in Virtual Environments by the Example of Osteotomy Operations. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 37-44). Amsterdam: IOS Press.

Baum, D. R. (1993). Virtual Reality: How Close Are We? In Proceedings of the Society for Information Display, 1993 International Symposium, (pp. 754-757). : Society for Information Display.

Baumann, R., Glauser, D., Tapy, D., Bauer, C., & Clavel, R. (1996). Force Feedback for Virtual Reality Based Minimally Invasive Surgery Simulator. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality, (pp. 564-579). Washington, DC: IOS Press.

Bayarri, S., Fernandez, M., Perez, M., & Rosich, F. (1994). Real Time Graphics and VR for Driving Simulation in Urban Environments. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 237-251). : World Scientific Publishing Co., Inc.

Bayarri, S., Fernandez, M., & Perez, M. (1996). Virtual Reality for Driving Simulation. Communications of the ACM [special issue on Virtual Reality Software and Technology], 39(5), 72-76.

Becheiraz, P., & Thalmann, D. (1996). A Model of Nonverbal Communication and Interpersonal Relationship between Virtual Actors. In Proceedings of the Computer Animation '96, (pp. 58-67). : IEEE Computer Society Press.

Becker, A. (1990). Design Case Study: Private Eye. Information Display, 6(3), 8-11.

Beeman, D., Bower, J. M., De Schutter, E., Efthimiadis, E. N., Goddard, N., & Leigh, J. (1997). The GENESIS Simulator-based Neuronal Database. In S. H. Koslow & M. F. Huerta (Eds.), Neuroinformatics: An Overview of the Human Brain Project, (pp. 57-80). Mahwah, N.J.: Lawrence Erlbaum Associates.

Beer, J. (1992). 3-Dimensional Desktop Animation: Fake Reality is Coming to a PC Near You. CD-ROM Professional, 5(6), 33-34, 36, 38.

Begault, D. R. (1990). The Composition of Auditory Space: Recent Developments in Headphone Music. Leonardo, 23(1), 45-52.

Begault, D. R. (1991). Challenges to the Successful Implementation of 3-D Sound. Journal of the Audio Engineering Society, 39(11), 864-870.

Begault, D. R., & Wenzel, E. (1991). Headphone Localization of Speech Stimuli. In Proceedings of the Human Factors Society, 35th Annual Meeting, (pp. 82-86). : Human Factors Society.

- Begault, D. R. (1992). An Introduction to 3-D Sound for Virtual Reality. In Proceedings of the Virtual Reality '92, VR Becomes a usiness, (pp. 4-15). : Meckler Publishing.
- Begault, D. R. (1992). Perceptual Effects of Synthetic Reverberation in Three-Dimensional Audio Systems. *Journal of the Audio Engineering Society*, 40(1), 895-904.
- Begault, D. R., & Wenzel, E. (1992). Techniques and Applications for Binaural Sound Manipulation in Human-Machine Interfaces. *The International Journal of Aviation Psychology*, 2(1), 1-22.
- Begault, D. R., & Wenzel, E. (1993). Headphone Localization of Speech. *Human Factors*, 35(2), 361-376.
- Begault, D. (1993). The Evolution of 3-D Audio. *MIX*, 17(10), 42-46.
- Begault, D. (1994). 3-D Sound for Virtual Reality and Multi-Media Applications. San Diego, CA: Academic Press.
- Begault, D. (1995). Head-Up Auditory Display Research at NASA Ames Research Center. In Proceedings of the Human Factors and Ergonomics Society, (pp. 114-118). : Human Factors and Ergonomics Society.
- Begault, D. R. (1995). Multi-Channel Spatialization System for Audio Signals, Washington, DC: Commisioner of Patents and Trademarks, . USA.
- Begelman, D. A. (1991). Virtual realities and virtual mistakes: A comment on Tart. *Dissociation: Progress in the Dissociative Disorders*, 4(4), 214-215.
- Bell, B., Bloom, C., Linton, F., & Norton, E. (1993). The LEAP Intelligent Tutoring Architecture. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 218). : NASA.
- Bell, J. T., & Fogler, H. S. (1996). Vicher: A virtual reality based educational module for chemical reaction engineering. *Computer Applications in Engineering Education*, 4(4), 285-296.
- Bell, D. H. (1996). Teaching virtual reality. *SIGCSE Bulletin*, 28(2), 56-61.
- Belz, C., Bohm, K., Duong, T., Kuhn, V., & Weber, M. (1996). Marking Spatial Parts within Stereoscopic Video Images. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 135-145). : SPIE.
- Benedikt, M. L. (1991). *Cyberspace: First Steps*. Cambridge, MA: MIT Press.
- Benedikt, M. (1993 November). Unreal Estates. *Architecture New York*, 1(3), 56-57.
- Benford, S. (1993). A Distributed Architecture for Large Collaborative Virtual Environments. In Proceedings of the IEE Colloquium on 'Distributed Virtual Reality', (pp. 9/1-7). : IEE.
- Benford, S., Bullock, A., Cook, N., Harvey, P., Ingram, R., & Lee, O. K. (1993). From Rooms to Cyberspace: Models of Interaction in Large Virtual Computer Spaces. *Interacting With Computers*, 5(2), 217-237.
- Benford, S., & Fahlen, L. (1993). A Spatial Model of Interaction in Large Virtual Environments. In Proceedings of the Third European Conference on Computer Supported Cooperative Work (ECSCW'93), . : .
- Benford, S., Greenhalgh, C., Bowers, J., Snowdon, D., & Fahlen, L. E. (1994). A Workout for Virtual Bodybuilders. In Proceedings of the ISMCR '94: Topical Workshop on Virtual Reality, (pp. 128-135). : NASA.

- Benford, S., Bowers, J., Fahlen, L. E., Mariani, J., & Rodden, T. (1994). Supporting Cooperative Work in Virtual Environments. *Computer Journal*, 37(8), 653-668.
- Benford, S., Bowers, J., Fahlen, L., & Greenhalgh, C. (1994). Managing Mutual Awareness in Collaborative Virtual Environments. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 223-236). : World Scientific Publishing Co, Inc.
- Benford, S., Bowers, J., Gray, S., Rodden, T., Rygol, M., & Stanger, V. (1994). The Virtuosi Project. In Proceedings of the VR'94: London Virtual Reality Expo 94, Fourth Annual Conference on Virtual Reality, (pp. 131-139). : Meckler.
- Benford, S., Snowdon, D., & Mariana, J. (1995). Populated Information Terrains: First Steps. In R. A. Earnshaw, J. A. Vince, & H. Jones (Eds.), *Virtual Reality Application*, (pp. 27-39). San Diego, CA: Academic Press.
- Benford, S., Bowers, J., Fahlen, L., Greenhalgh, C., Mariani, J., & Rodden, T. (1995). Networked Virtual Reality and Cooperative Work. *Presence: Teleoperators and Virtual Environments*, 4(4), 364-386.
- Benford, S., Snowdon, D., Greenhalgh, C., Ingram, R., Knox, I., & Brown, C. (1995). VR-VIBE: A Virtual Environment for Cooperative Information Retrieval. *Computer Graphics Forum*, 14(3), 349-360.
- Benford, S., Bowers, J., Fahlen, L. E., Greenhalgh, C., & Snowdon, D. (1995). User Embodiment in Collaborative Virtual Environments. In Proceedings of the CHI'95, (pp. 242-249). : ACM.
- Benford, S. D., & Greenhalgh, C. M. (1995). Collaborative Virtual Environments on the Internet. *Connexions: The Interoperability Report*, 9(10), 18-24.
- Benford, S. D., Brown, C. C., Reynard, G. T., & Greenhalgh, C. M. (1996). Shared Spaces: Transportation, Artificiality and Spatiality. In Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW'96), (pp. 77-86). : ACM Press.
- Benford, S., Greenhalgh, C., & Lloyd, D. (1997). Crowded Collaborative Virtual Environments. In Proceedings of the CHI '97: 1997 ACM Conference on Human Factors in Computing Systems, (pp. 59-66). : ACM Press.
- Benford, S. D., Bowers, J. M., Fahlen, L. E., Greenhalgh, C. M., & Snowdon, D. N. (1997). Embodiments, Avatars, Clones and Agents for Multi-user, Multi-sensory Virtual Worlds, Multimedia Systems. Berlin, Germany: Springer-Verlag.
- Benjamin, I., & Cooper, M. (1995). Virtual Tourism: A realistic assessment of virtual reality for the tourist industry. In Proceedings of the ENTER 95: Information and Communication Technologies in Tourism, (pp. 135-143). : Springer-Verlag.
- Bennett, R. (1995 Spring). Walking Virtually: Help for Parkinson's Disease. *Virtual Reality Special Report*, 2(1), 27-30.
- Berg, T. (1994). Virtual Reality Resource Guide. *Virtual Reality Special Report*, 1(4), 33-50.
- Berg, T. (1994 Fall). Virtual Reality Resource Guide. *Virtual Reality Special Report*, 1(3), 39-56.
- Berg, T. D. (1995). Virtual Reality Resource Guide. *Virtual Reality Special Report*, 2(1), 42-64.

- Bergamasco, M., Degl-Innocenti, P., Rigucci, G., & Bucciarelli, D. (1994). Grasping and Moving Objects in Virtual Environments: A Preliminary Approach towards a Realistic Behavior. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 44-49). : IEEE.
- Bergamasco, M., De Paolis, L., Ciancio, S., & Pinna, S. (1994). A Prevision System in Large Time-Delayed Teleoperation. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 27-36). : Queen Mary & Westfield College.
- Bergamasco, M. (1995). Haptic Interfaces: The Study of Force and Tactile Feedback Systems. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 15-20). : IEEE.
- Bergamasco, M., Bucciarelli, D., & Degl'Innocenti, P. (1995). Fast Algorithms for Drawing Nonuniform B-spline Surfaces: A Practical Application in Virtual Environment. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 59-69). New York, NY: SpringerWien.
- Bergamasco, M. (1996). Real-Time Animation of a Virtual Arm and Its Collisions with a Virtual Environment. In Proceedings of the Computer Animation '96, (pp. 13). : IEEE Computer Society Press.
- Bergamasco, M., Alessi, A. A., Arceri, V., Calcara, M., Caruso, S., & Conte, P. G. (1996). The VETIR System: a Virtual Environment Approach to Motor Dexterity Disabilities. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 113-124). : Queen Mary & Westfield College.
- Bergen, D. E., Darken, J. P., & Duckworth, A. (1993). Applying Virtual Environment Technology to Large Scale Simulation Systems (NRL Technical Report number 5707-93-9560): Naval Research Laboratory.
- Berger, P. (1995). Virtual Reality in France. In Proceedings of the Virtual Reality World '95, (pp. 31-32). : IDG Conferences and Seminars.
- Berger, M. O., Cevrier, C., & Simon, G. (1996). Compositing Computer and Video Image Sequences: Robust Algorithms for the Reconstruction of the Camera Parameters. *Computer Graphics Forum*, 15(3), C23-C32, C457-C458.
- Bergeron, B., & Obeid, J. (1995). Temporal issues in the design of virtual learning environments. *Journal of Educational Multimedia and Hypermedia*, 4(2- 3), 127-145.
- Bergman, L. D., Richardson, J. S., Richardson, D. C., & Brooks, F. P., Jr. (1993). VIEW - An Exploratory Molecular Visualization System with User-Definable Interaction Sequences. In Proceedings of the SIGGRAPH '93, (pp. 117-126). : ACM.
- Bergsneider, C. (1992). Deployable Simulators Using Helmet-Mounted Displays. In Proceedings of the 1992 IMAGÉ Conference VI, (pp. 11-16). : IMAGÉ Society.
- Berguer, R., Loeb, R. G., & Smith, W. D. (1996). Use of the Virtual Instrumentation Laboratory for the Assessment of Human Factors in Surgery and Anesthesia. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 187-194). Washington, DC: IOS Press.
- Berlage, T., Fox, T., Grunst, G., & Quast, K. J. (1996). Supporting ultrasound diagnosis using an animated 3D model of the heart. In Proceedings of the International Conference on Multimedia Computing and Systems, (pp. 34-39). : IEEE Computer Society Press.

- Bermudez, A. B., & Palumbo, D. (1994). Bridging the Gap between Literacy and Technology: Hypermedia as a Learning Tool for Limited English Proficient Students. *Journal of Educational Issues of Language Minority Students*, 14, 165-184.
- Bers, J. (1996). A Body Model Server for Human Motion Capture and Representation. *Presence: Teleoperators and Virtual Environments*, 5(4), 381-392.
- Bersot, O., El Guedj, P.-O., Godéreaux, C., & Nugues, P. (1996). A Conversational Agent to Help Navigation and Collaboration in Virtual Worlds. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Bertera, J. H. (1992). Oculomotor Adaption With Virtual Reality Scotomas. *Simulation*, 59(1), 37-44.
- Bertol, D. (1996). Architecture of Images: An Investigation of Architectural Representations and the Visual Perception of Three-Dimensional Space. *Leonardo*, 29(2), 87-94.
- Bertol, D. (1996). Designing Digital Space. New York, NY: John Wiley & Sons.
- Bertol, D. (1997). Designing Digital Space: An Architect's Guide to Virtual Reality. New York, NY: John Wiley & Sons, Inc.
- Bertram, B., Peyton, J., & Batson, T. (Eds.). (1993). Network-Based Classrooms. New York, NY: Cambridge University Press.
- Beschers, C., & Feiner, S. (1992). Automated Design of Virtual Worlds for Visualizing Multivariate Relations. In Proceedings of the Visualization '92, (pp. 283-290). : IEEE Computer Society Press.
- Beschers, C., & Feiner, S. (1993). AutoVisual: Rule-based design of interactive multivariate visualizations. *IEEE Computer Graphics and Applications*, 13(4), 41-49.
- Bess, R. (1992). Image Generation Implications for Networked Tactical Training Systems. In Proceedings of the 1992 IMAGE Conference VI, (pp. 77-88). : IMAGE Society.
- Bess, R. D. (1993). Image Generation Implications for Networked Tactical Training Systems. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 308-317). : IEEE Service Center.
- Best, S. (1996). Perceptual and oculomotor implications of interpupillary distance settings on a head-mounted virtual display. In Proceedings of the IEEE 1996 National Aerospace and Electronics Conference, NAECON 1996, (pp. 429-434). : IEEE.
- Bettega, G., Dessenne, V., Raphael, B., & Cinquin, P. (1996). Computer-assisted Mandibular Condyle Positioning in Orthognathic Surgery. *Journal of Oral Maxillofacial Surgery*, 54, 553-558.
- Bettis, D., Desrosiers, S., Mulcihy, D., & Ruta, K. (1993). Robo-Cat -- An Intelligent Robotics Trainer. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 417). : NASA.
- Bewick, N., & Riedel, O. (1995). Enhancing - Architectural Details Using Virtual Environments. In Proceedings of the Virtual Reality World '95, (pp. 91-98). : IDG Conferences and Seminars.
- Bex, P. J., Edgar, G. K., & Smith, A. T. (1993). Temporal Aliasing: Investigating Multiple Imaging [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.

Bhatnagar, D. K. (1993). Position Trackers for Head Mounted Display Systems: A Survey (UNC Technical Report No. TR93-010): Dept. of Computer Science, University of North Carolina.

Bhavnani, S. K., & John, B. E. (1997). From Sufficient to Efficient Usage: An Analysis of Strategic Knowledge. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 91-98). : ACM, Inc.

Bible, S. R., Zyda, M., & Brutzman, D. (1995). Using Spread-Spectrum Ranging Techniques for Position Tracking in a Virtual Environment. In Proceedings of the Network Realities '95, (pp. unpaginated). : Naval Postgraduate School.

Bick, F. A. E. (1993). Special Issue on Virtual Reality. *Technologies Tomorrow*, 1(3), entire magazine.

Bieri, H., & Mayor, D. (1993). A Ternary Tree Representation of Generalized Digital Images. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 23-36). New York, NY: John Wiley and Sons.

Bievenue, L. A., Curtis, D. H., & Thakkar, U. (1995). Virtual environments in K-12 learning and discovery: a grand challenge in education? *Computer Graphics*, 29(4), 43-44.

Billinghurst, M., & Weghorst, S. (1995). The Use of Sketch Maps to Measure Cognitive Maps of Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 40-47). : IEEE Computer Society Press.

Billinghurst, M. (1995). Do You See What I See? *Virtual Reality Special Report*, 2(1), 21-26.

Billinghurst, M., & Savage, J. (1996). Adding Intelligence to the Interface. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 168-177). : IEEE Computer Society Press.

Billinghurst, M., Savage, J., Oppenheimer, P., & Edmond, C. (1996). The Expert Surgical Assistant: An Intelligent Virtual Environment with Multimodal Input. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 590-607). Washington, DC: IOS Press.

Billinghurst, M., Savage, J., Oppenheimer, P., & Edmond, C. (1996). The Expert Surgical Assistant: An Intelligent Virtual Environment with Multimodal Input (HITL Publication P-95-13): University of Washington, Human Interface Technology Laboratory.

Billings, D. M., & Cobb, K. L. (1992). Effects of Learning Style Preferences, Attitude and GPA on Learner Achievement Using Computer Assisted Interactive Videodisc Instruction. *Journal of Computer-Based Instruction*, 19(1), 12-16.

Billyard, A. (1993). Shifting the Software/Silicon Balance in High Performance 3D Graphics. In Proceedings of the VR '93 Virtual Reality International 93, the Third Annual Conference on Virtual Reality, (pp. 19-23). : Meckler.

Biocca, F. (1992). Will Simulation Sickness Slow Down the Diffusion of Virtual Environment Technology? *Presence: Teleoperators and Virtual Environments*, 1(3), 334-343.

Biocca, F. (1992). Communication Design in Virtual Reality. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 16-37). : Meckler Publishing.

Biocca, F., & Lanier, J. (1992). An Insider's View of the Future of Virtual Reality. *Journal of Communication*, 42(4), 150-172.

- Biocca, F. (1992). Communication Within Virtual Reality: Creating a Space for Research. *Journal of Communication*, 42(4), 5-22.
- Biocca, F. (1992). Virtual Reality Technology: A Tutorial. *Journal of Communication*, 42(4), 23-73.
- Birt, J., & Furness, T. A. (1974). Visually-Coupled Systems. *Air University Review*, 20(3), 28-40.
- Bishop, G., Bricken, W., Brooks, F., Brown, M., Burbeck, C., Durlach, N., Ellis, S., Fuchs, H., Green, M., Lackner, J., McNeill, M., Moshell, M., Pausch, R., Robinett, W., Srinivasan, M., Sutherland, I., Urban, D., & Wenzel, E. (1992). Research Directions in Virtual Environments: Report of an NSF Invitational Workshop. *Computer Graphics*, 26(3), 153-177.
- Bishop, P. A. (1992). "Beep". *Presence: Teleoperators and Virtual Environments*, 1(1), 151-152.
- Blackburn, D. (1994). The Convergence of Sports and VR. *Virtual Reality Special Report*, 1, 57-60.
- Blackburn, D. (1996). Wired Athletes. *Iris Universe*, 36, 35.
- Blackmon, T. T., & Stark, L. W. (1996). Cooperative Assistance for Remote Robot Supervision. *Presence: Teleoperators and Virtual Environments*, 5(2), 224-240.
- Blackmon, T. T., & Stark, L. W. (1996). Model-Based Supervisory Control in Telerobotics. *Presence: Teleoperators and Virtual Environments*, 5(2), 205-223.
- Blade, R. (1995). Stereoscopic Photography on the Computer. *The International Journal of Virtual Reality: A Multimedia Publication for Professionals*, 1(2), 40-41.
- Blanc, C., & Schlick, C. (1996). Accurate Parametrization of Conics by NURBS. *IEEE Computer Graphics and Applications*, 16(6), 64-71.
- Blanchard, C., Burgess, S., Harvill, Y., Lanier, J., Lasko, A., Oberman, M., & Teitel, M. (1990). Reality Built for Two: a Virtual Reality Tool. In *Proceedings of the Symposium on Interactive 3-D*, (pp. 35-36). : ACM.
- Blattner, M. M., Papp, A. L., & Glinert, E. P. (1994). Sonic Enhancement of Two-Dimensional Graphic Displays. In *Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces*, (pp. 447-470). : Addison-Wesley Publishing Co.
- Blattner, M. M. (1995). Many Facets of Auditory Display (N96 28119, PC A14/MF A03): Lawrence Livermore National Lab.
- Blau, B., Hughes, C., Moshell, J. M., & Lisle, C. (1992). Networked Virtual Environments. *Computer Graphics: Special Issue on 1992 Symposium on Interactive 3D Graphics*, 157-160.
- Blau, B., & Yurica, K. (1994 September/October). Designing VR Applications for the Desktop. *Virtual Reality World*, 2(5), 17-21.
- Blauert, J., Lehnert, H., Pompetzki, W., & Xiang, N. (1990). Binaural Room Simulation. *Acustica*, 72(4), 295-296.
- Blauert, J. (1992). Auditory Virtual Environment and Telepresence [special issue]. *Applied Acoustics*, 36(3-4).
- Blauert, J. (1993). *Spatial Hearing*. Cambridge, MA: MIT Press.

- Bleecker, S. E. (1994 March-April). The Virtual Organization. *The Futurist: A Journal of Forecast, Trends, and Ideas about the Future*, 28(2), 9-12, 14.
- Blezek, D. J., Robb, R. A., Camp, J. J., & Nauss, L. A. (1996). Anesthesiology Training Using 3D Imaging and Virtual Reality. In Proceedings of the Medical Imaging 1996, (pp. 402-410). : SPIE.
- Bliss, J. P., Tidwell, P. D., & Guest, M. A. (1997). The Effectiveness of Virtual Reality for Administering Spatial Navigation Training to Firefighters. *Presence: Teleoperators and Virtual environments*, 6(1), 73-86.
- Blonde, L., Buck, M., Galli, R., Niem, W., Paker, Y., Schmidt, W., & Thomas-G. (1996). A virtual studio for live broadcasting: the Mona Lisa project. *IEEE Multimedia*, 3(2), 18-29.
- Bloom, C. P., Bell, B., Linton, F., & Norton, E. (1993). The Learn Explore and Practice (LEAP) Intelligent Tutoring Systems Platform. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 128-144). : NASA.
- Bloom, R. W. (1996). Psychiatric Therapeutic Applications of Virtual Reality Technology (VRT): Research Prospectus and Phenomenological Critique. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 11-16). Washington, DC: IOS Press.
- Blow, R. (1995 January/February). Dr. Dolphin: Why Does Swimming with Dolphins Help Humans Heal? *Mother Jones*, 20(1), 28[4].
- Blumenfeld, S. M. (1995). Novel Imaging for Novel Therapy. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 45-47). Amsterdam: IOS Press.
- Blumenfeld, S. M. (1996). A Glimpse at the Surgery for the Next Century. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 319). Washington, DC: IOS Press.
- Blurton, C., & McGee, S. (1996). Mission to Planet Earth on-line Earth Systems Science course. In Proceedings of the IGARSS '96: 1996 International Geoscience and Remote Sensing Symposium - Remote Sensing for a Sustainable Future, (pp. 917-919). : IEEE.
- Bly, S. (1994). Multivariate Data Mappings. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 405-416). : Addison-Wesley Publishing Company.
- Bobick, A., Davis, J., Intille, S., Baird, F., Campbell, L., Ivanov, Y., Pinhanez, C., Schutte, A., Wilson, A., & Davenport, G. (1996). KidsRoom: Action Recognition in an Interactive Story Environment (MIT Technical Report #398): Cambridge, MA: Massachusetts Institute of Technology, MIT Media Lab Perceptual Computing Group.
- Boehm, K., Broll, W., & Sokolewicz, M. (1994). Dynamic Gesture Recognition Using Neural Networks: A Fundamental for Advances Interaction Construction. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems, (pp. 336-346). : SPIE.
- Bohn, C. A., & Krueger, W. (1993). Embedding Speech into Virtual Realities. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 171-178). : NASA.

Bohner, P., Pokrandt, P., & Hassfeld, S. (1996). Simultaneous Planning and Execution in Carnio- and Maxillofacial Surgery. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 435-446). Washington, DC: IOS Press.

Bolas, M. T., & Fisher, S. S. (1990). Head-Coupled Remote Stereoscopic Camera System for Telepresence Applications. In *Proceedings of the Stereoscopic Displays and Applications*, (pp. 113-123). : SPIE.

Bolas, M. T. (1992). Human Interface Issues. In *Proceedings of the Virtual Worlds: Real Challenges - Papers from SRI's 1991 Conference on Virtual Reality*, (pp. 1-4). : Meckler Publishing.

Bolas, M. T. (1993). Practical VR - Five Years of Lessons Learned. In *Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology*, (pp. 396+). : NASA.

Bolas, M. T. (1993). Practical VR: Five Years of Lessons Learned. In *Proceedings of the IVR '93: Industrial Virtual Reality Show and conference*, (pp. 90-99). : Reed Exhibitions Japan Ltd.

Bolas, M. T., Lorimer, E. R., McDowall, I. E., & Mead, R. X. (1994). Proliferation of Counterbalanced, CRT-based Stereoscopic Displays for Virtual Environment Viewing and Control. In *Proceedings of the Stereoscopic Displays and Applications*, (pp. 325-334). : SPIE.

Bolas, M. T. (1994 January). Human Factors in the Design of an Immersive Display. *IEEE Computer Graphics and Applications*, 14(1), 55-59.

Bolter, J. D., & van der Mast, C. (1993). Voice Annotation: Adding Verbal Information to Virtual Environments (DUT-TWI-93-67).

Bolter, J. D., & van der Mast, C. (1993 March). The World Processor: An Interface for Textural Display and Manipulation in Virtual Reality (DUT-TWI-93-55): Delft University of Technology.

Bolter, J., Hodges, L. F., Meyer, T. C., & Nichols, A. (1995). Integrating perceptual and symbolic information in VR. *VR Blackboard* in *IEEE Computer Graphics and Applications*, 15(4), 8-11.

Bolzoni, M., Riva, G., & Melis, L. (1996). Interacting with People and Objects in Virtual Environments: Metaphors for User Centered Design. In *Proceedings of the CVE'96: Collaborative Virtual Environments*, (pp. not paginated). : University of Nottingham.

Bolzoni, M., & Marom, R. (1996). Effects of Virtual Presence in Collaborative Environments: Social and Cognitive Aspects of Video-Mediated Interaction [poster]. In *Proceedings of the CVE'96: Collaborative Virtual Environments*, (pp. not paginated). : Unviersity of Nottingham.

Boman, D., Shlager, M. S., Gille, J., & Piantanida, T. (1992). The Readiness of Virtual Environment Technology for Use in Maintenance Training. In *Proceedings of the Interservice/Industry Training Equipment and Education Conference*, (pp. 883-891). : National Security Industrial Association.

Boman, D., Piantanida, T., & Schlager, M. (1993). Virtual environment systems for maintenance training: Final Report. (Vol. 1-4). Menlo Park, CA: SRI International.

Boman, D. (1994). Commercial applications of virtual environments. In *Proceedings of the WESCON/94: Idea/Microelectronics*, (pp. 82-86). : IEEE.

Boman, D. K. (1995, June). International Survey: Virtual-Environment Research. *Computer*, 57-65.

Bordas, J. C., Fuchs, P., & Emadotte, D. (1996). Stereo Vision and Telepresence. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 106-114). : SPIE.

Bordegoni, M., & Hemmje, M. (1993). A Dynamic Gesture Language and Graphical Feedback for Interaction in a 3D User Interface. In Proceedings of the Eurographics '93, (pp. C:01-C:12). : North-Holland.

Bordegoni, M. (1994). Parallel Use of Hand Gestures and Force-Input Device for Interacting with 3D and Virtual Reality Environments. *International Journal of Human-Computer Interaction*, 6(4), 391-431.

Borovoy, R., McDonald, M., Martin, F., & Resnick, M. (1996). Things that blink: Computationally augmented name tags. *IBM Systems Journal*, 35(3-4), 488-495.

Borsook, P. (1996). The Art of Virtual Reality. *Iris Universe*, 36, 36-40.

Borsook, P. (1996). Digital Doctors: Experiential Computing Helps People Get Healthy. *Iris Universe*, 36, 42-45.

Bos, P. J. (1993). Performance Limits of Stereoscopic Viewing Systems Using Active and Passive Glasses. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 371-376). : IEEE Service Center.

Bostrum, M., Singh, S. K., & Wiley, C. W. (1993). Design of an Interactive Lumbar Puncture Simulator with Tactile Feedback. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 280-286). : IEEE Service Center.

Bottoms, W. R. (1994, July). Virtual Reality: Top of the Food Chain. *The Red Herring*(12), 40-42.

Boulic, R., Magnenat-Thalmann, N. M., & Thalmann, D. (1990). A Global Human Walking Model with Real Time Kinematic Personification. *The Visual Computer*, 6(6), 344-358.

Boulic, R., Capin, T., Huang, Z., Kalra, P., Lintermann, B., Magnenat-Thalmann, N., Moccozet, L., Molet, T., Pandzic, I., Saar, K., Schmitt, A., Shen, J., & Thalmann, D. (1995). The HUMANOID environment for interactive animation of multiple deformable human characters. *Computer Graphics Forum*, 14(3), C/337-348.

Boulic, R., Rezzonico, S., & Thalmann, D. (1996 July). Multi-Finger Manipulation of Virtual Objects. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 67-74). : ACM.

Bouvier, E., & Guilloteau, P. (1996). Crowd Simulation in Immersive Space Management. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 104-110). : SpringerWien.

Bowers, J., Pycock, J., & O'Brien, J. (1996). Talk and Embodiment in Collaborative Virtual Environments. In Proceedings of the CHI'96, (pp. not paginated). : ACM Press.

Bowers, J., O'Brien, J., & Pycock, J. (1996). Practically Accomplishing Immersion: Cooperation in and for Virtual Environments. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

Bowersox, N. C., LaPorta, A. N., Cordts, P. R., Bhoyrul, S., & Shah, A. (1996). Comask Performance in Cyberspace: Surgical Procedures in a Telepresence

Environment. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 21-35). Washington, DC: IOS Press.

Bowman, D. (1995). WiMP Design Tools for Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 45-52). : IEEE Computer Society Press.

Bowman, D., & Hodges, L. (1995). User Interface Constraints for Immersive Virtual Environment Applications (GIT-GVU-95-26): Graphics, Visualization, and Usability Center.

Bowman, D. (1996). Conceptual Design Space - Beyond Walk-through to Immersive Design. In D. Bertol (Ed.), *Designing Digital Space: An Architect's Guide to Virtual Reality*, . New York, NY: John Wiley & Sons, Inc.

Bowman, D., Hodges, L., & Bolter, J. (1996). The Virtual Venue: User-Computer Interaction in Information-Rich Virtual Environments (GIT-GVU-96-22): Graphics, Visualization, and Usability Center.

Bowman, D., Koller, D., & Hodges, L. (1997). Travel in Immersive Virtual Environments: An Evaluation of Viewpoint Motion Control Techniques. In Proceedings of the IEEE VRAIS '97: Virtual Collaborative Environments, (pp. 45-52). : IEEE Society Press.

Bowman, D., & Hodges, L. (1997). An Evaluation of Techniques for Grabbing and Manipulating Remote Objects in Immersive Virtual Environments. In Proceedings of the 1997 Symposium on Interactive 3D Graphics, (pp. 35-38). : ACM.

Bowskill, J., & Downie, J. (1995). Extending the Capabilities of the Human Visual System: An Introduction to Enhanced Reality. *Computer Graphics*, special issue: Modular Visualization Environments (MVEs), 29(2), 61-65.

Bowskill, J., & Traill, D. (1996). Interactive Collaborative Media Environments. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

Boyd, C., & Darken, J. P. (1996). Psychological Issues of Virtual Environment Interfaces: A CHI 96 Workshop. *SIGCHI Bulletin*, 28(4), 49-53.

Boyes, E. (1993). How do high school students perceive global climatic change: What are its manifestations? What are its origins? What corrective action can be taken? *Journal of Science Education and Technology*(2), 541-547.

Boyle, T., Stevens-Wood, B., Zhu, F., & Tikka, A. (1996). Structured learning in a virtual environment. *Computers & Education*, 26(1-3), 41-49.

Bradford-Paley, W. (1992). Head-Tracking Stereo Display: Experiments and Applications. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 84-89). : SPIE.

Braffort, A. (1996). A Gesture Recognition Architecture for Sign Language. In Proceedings of the Assets '96: the Second Annual ACM Conference on Assistive Technologies, (pp. 102-109). : ACM SIGGRAPH.

Brancato, J. P. (1993). Interactive media as environments: A phenomenological investigation. Unpublished dissertation, New York, NY: New York University.

Brauer, V. (1996). Simulation Model Design in Physical Environments. Computer Graphics [Focus: "Real" Virtual Reality], 30(4), 55-56.

Braunberg, A. C. (1995). Virtual Reality Simulates Manufacturing Processes. Signal: Afcea's International Journal, 49(10), 47-53.

Breen, P., Grinstein, G. G., Mizell, D. W., Satava, R. M., Smith, B., Stephens, M. M., & Zeltzer, D. (1992). Real Virtual Environment Applications Now. In Proceedings of the Visualization '92, (pp. 375-379). : IEEE Computer Society Press.

Breen, D. E., Whitaker, R. T., Rose, E., & Tuceryan, M. (1996). Interactive Occlusion and Automatic Object Placement for Augmented Reality. Computer Graphics Forum, 15(3), C:11-C:22.

Breen, P. T., Grinstein, G. G., Leger, J. R., Southard, D. A., & Wingfield, M. A. (1996). Virtual Design Prototyping Applied to Medical Facilities. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 388-399). Washington, DC: IOS Press.

Breglia, D. (1992). Virtual Environment Training Technology. In Proceedings of the 1992 IMAGE Conference VI, (pp. 17-28). : IMAGE Society.

Breiteneder, C., Gibbs, S. J., & Arapis, C. (1996). TELEPORT - An Augmented Reality Teleconferencing Environment. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 41-49). : SpringerWein.

Brelsford, J. W. (1993). Physics Education in a Virtual Environment. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting: Designing for Diversity, (pp. 1286-1290). : Human Factors Society.

Brennan, J. P. (1994). Towards the Delivery Room of the Future. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 10-14). : Aligned Management Associates.

Brennan, J. P., & Brennan, J. A. (1994). Virtual Reality in the Delivery Room of the Future. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 52-54). : SIG-Advanced Applications, Inc.

Brennan, J. P., & Brennan, J. A. (1994). Virtual Reality in the Delivery Room. Virtual Reality Systems, 1(3), 24-27.

Brennan, J. P., & Brennan, J. A. (1995). Clinical Applications of a High-Performance Computing System for Visualizing and Monitoring Human Labor Birth. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 48-52). Amsterdam: IOS Press.

Brennan, J. P., & Brennan, J. A. (1996). A System for the Delivery of Remote Obstetrical Care by Telepresence. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 306-312). Washington, DC: IOS Press.

Brett, G. H., II. (1993). Networked Information Retrieval Tools in the Academic Environment: Towards a Cybernetic Library. Internet Research, 3(3), 26-36.

Brewer, W., & Chinn, C. A. (1991). Entrenched beliefs, inconsistent information and knowledge change. In Proceedings of the The International Conference of the Learning Sciences, (pp. unpaginated). : Association for the Advancement of Computing in Education.

- Brewster, S. A., Wright, P. C., & Edwards, A. D. N. (1994). A Detailed Investigation into the Effectiveness of Earcons. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 471-498). : Addison-Wesley Publishing Co.
- Bricken, W. B. (1990). Software Architecture for Virtual Reality (P-90-4): Seattle, WA: Human Interface Technology Laboratory.
- Bricken, W. B. (1990). Virtual Reality: Directions of Growth. Notes from the SIGGRAPH '90 Panel (M-90-1): Seattle, WA: Human Interface Technology Laboratory.
- Bricken, M. (1991). Virtual Reality Learning Environments: Potential and Challenges. In Proceedings of the SIGGRAPH 91, (pp. 178-184). : ACM SIGGRAPH.
- Bricken, W. (1991). Learning in Virtual Reality (HITL-TR-M-90-5): Seattle, WA: University of Washington, Human Interface Technology Laboratory.
- Bricken, M., & Byrne, C. M. (1992). Summer Students in Virtual Reality: A Pilot Study on Educational Applications of Virtual Reality Technology (HITL-TR-R-92-1): Seattle, WA: University of Washington, Human Interface Technology Laboratory.
- Bricken, W., & Winn, W. (1992). Designing Virtual Worlds for Use in Mathematics Education: The Example of Experiential Algebra. *Educational Technology*, 32, 12-19.
- Bricken, W. (1992). A Formal Foundation for Cyberspace. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 9-36). : Meckler.
- Bricken, W. B. (1992). Languages for Virtual Reality: Spatial Representation of Elementary Algebra. In Proceedings of the 1992 IEEE Workshop on Visual Languages, (pp. 55-62). : IEEE Computer Society Press.
- Bricken, W., & Jacobson, L. (1992, July). Virtual Environment Operating System. *AI Expert*, 55-58.
- Bricken, M., & Byrne, C. (1993). Summer Students in Virtual Reality: A Pilot Study on Educational Applications of Virtual Reality Technology. In A. Wexelblat (Ed.), *Virtual Reality: Applications and Explorations*, (pp. 199-217). San Diego, CA: Academic Press.
- Bricken, W. B., & Coco, G. (1993). The VEOS Project (R-93-3): Seattle, WA: Human Interface Technology Laboratory.
- Bricken, W. B., Pezely, D., Evenson, M., & Almquist, M. (1993). A Second Step Towards Virtual Reality: The Entity Model and System Design (M-93-1): Seattle, WA: Human Interface Technology Laboratory.
- Bricken, W., & Coco, G. (1994). The VEOS Project. *Presence: Teleoperators and Virtual Environments*, 3(2), 111-129.
- Bricken, W., & Coco, G. (1995). VEOS: The Virtual Environment Operating Shell. In I. T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 102-144). New York, NY: Oxford University Press.
- Brickman, B. J., Hettinger, L., Roe, M. M., Lu, L., Repperger, D. W., & Haas, M. W. (1996). Haptic Specification for Environmental Events: Implications for the Design of Adaptive, Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 147-156). : IEEE Computer Society Press.
- Brill, L. M. (1992). An Interactive Trip into Virtual Paradise. *Computer Graphics World*, 15(9), 22.

- Brill, L. M. (1992 April). Facing Interface Issues. Computer Graphics World [Special Report: Virtual Reality], 15(4), 48-55.
- Brill, L. M. (1992 September). An Interactive Trip into Virtual Paradise. Computer Graphics World, 15(9), 22.
- Brill, L. (1993). Kicking the Tires of VR Software. Computer Graphics World, 16(6), 40-53.
- Brill, L. M. (1993). Looking Glass Playgrounds Hit the Entertainment Bullseye. Virtual Reality World, 1(3 and 4), 41-49.
- Brill, L. (1993,). Metaphors for the Traveling Cybernaut - Part I. Virtual Reality World [Virtual Reality World is an insert in Multimedia Review}, 1(1), q-s.
- Brill, L. M. (1994). The Networked VR Museum. Virtual Reality World, 2(3), 30-33.
- Brill, L. M. (1994). Museum VR: Part I. Virtual Reality World, 1(6), 33-40.
- Brill, L. M. (1994). The Networked VR Museum: Where Art Meets Cyberspace. Virtual Reality World, 2(1), 12-17.
- Brill, L. M. (1994). Electronic Playgrounds, Living Room Style. Virtual Reality World, 2(2), 18-32.
- Brill, L. M. (1994). Metaphors for the Traveling Cybernaut - Part II. Virtual Reality World, 2(3), 30-33.
- Brill, L. M. (1994). Virtual Reality: Designing Authoring, and Toolkit Cyber Software. Virtual Reality World, 2(3), 22-29.
- Brill, L. M. (1994 March). Electronic Playgrounds, Living Room Style. Virtual Reality World, 2(2), 18-32.
- Brill, L. M. (1994 November/December)). Museum-VR: Opening the Gateway to Cyberspace, Part1. Virtual Reality World, 2(6), 33-40.
- Brill, L. M. (1994, July). Location Based Entertainment: Trend or Fad? The Red Herring(12), 44-46.
- Brill, L. M. (1995). Museum VR: Part II. Virtual Reality World, 3(1), 36-43.
- Brill, L. M. (1995). Playgrounds of the Digital Domain. Virtual Reality Special Report, 2(1), 65-72.
- Brill, L. M. (1995 May/June). Michael Getlan: Funmeister of the Arcades. VR World, 3(3), 24-27.
- Brill, L. M. (1995, March). Somewhere Over the Rainbow: Creating Virtual Realities. DV, 32-42.
- Brill, L. M. (1996). Hotbeds of Cool Research: Virtual Reality in the Lab. Iris Universe, 36, 60-62.
- Brittan, D. (1995). Knowing Where Your Head is at: Use of Inertial Tracker for Virtual Reality Systems. Technology Review, 98(2), 10(2).
- Britton, D. (1993). Funding Opportunities for VR Development. In Proceedings of the VR '93 Virtual Reality International 93, The Third Annual Conference on Virtual Reality, (pp. 62-71). : Meckler.

- Bro-Nielsen, M. (1996). Fast Finite Elements for Surgery Simulation. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 395-400). Washington, DC: IOS Press.
- Brockl-Fox, U. (1995). Hand-Gesture Recognition as a 3-D Input Technique. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 119-134). New York, NY: SpringerWien.
- Brodersen, A. J., Bourne, J. R., Mosterman, P., Campbell, J. O., Bouw, R., Burows, C., & Mommer, M. (1993). The ELF project: Creating the future laboratory. In Proceedings of the FIE (Frontiers in Education) Twenty-Third Annual Conference, *Engineering Education: Renewing America's Technology*, (pp. 277-279). : IEEE.
- Broll, W. (1995). Interacting in Distributed Collaborative Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 148-155). : IEEE Computer Society Press.
- Broll, W., & England, D. (1996). Bringing Worlds Together: Adding Multi-User Support to VRML. In Proceedings of the 1995 Symposium on Virtual Reality Modeling Language (VRML), (pp. 87-94). : ACM.
- Broll, W., & Koop, T. (1996). VRML: Today and Tomorrow. *Computers & Graphics*, 20(3), 427-434.
- Broll, W. (1996). Extending VRML to Support Collaborative Virtual Environments. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Broll, W., England, D., Fechter, J., & Koop, T. (1996). Towards interactive virtual environment: Interaction and behavior extensions for VRML (A96-04766): Springfield, VA: NTIS.
- Broll, W. (1997). Distributed Virtual Reality for Everyone - A Framework for Networked VR on the Internet. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 121-128). : IEEE Computer Society Press.
- Brooks, F. P., Jr. (1986). Walkthrough--A Dynamic Graphics System for Simulation Virtual Buildings. In Proceedings of the 1986 Workshop on Interactive 3D Graphics, (pp. 271-281). : SCM.
- Brooks, F. P., Jr. (1988). Grasping Reality Through Illusion: Interactive Graphics Serving Science. In Proceedings of the CHI '88, (pp. 3:1-3:11). : ACM.
- Brooks, F. P., Jr. (1989). The Computer Scientist as Toolsmith: Studies in Interactive Computer Graphics. In Proceedings of the Implementing and Interacting with Real-Time Microworlds, (pp. 6:1-6:10). : ACM.
- Brooks, F. P., Jr., Ming-Ouh-Young, Batter, J. J., & Killpatrick, P. J. (1990). Project GROPE-Haptic Displays for Scientific Visualization. In Proceedings of the SIGGRAPH 1990, (pp. 177-185). : ACM Press.
- Brooks, F. P., Jr., Airey, J., Alspaugh, J., Bell, A., Brown, R., Hill, C., Nimsheck, U., Rheingans, P., Rohlf, J., Smith, D., Turner, D., Varshney, A., Wang, Y., Weber, H., & Yuan, X. (1992). Six Generations of Building Walkthrough: Final Technical Report to the National Science Foundation (TR92-026): Chapel Hill, NC: Dept. of Computer Science, University of North Carolina.
- Brooks, F. P., Jr. (1993). Virtual Reality--Hype and Hope: What's Real? In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 2-3). : IEEE Computer Society Press.

- Brooks, F. P., Jr. (1995). Realizing Virtual Worlds. *Computer Graphics Forum*, 14(3), C/481.
- Brooks, F. P., Jr. (1996). The Computer Scientist as a Toolsmith, II. *Communications of the ACM*, 39(3), 61-68.
- Brown, D. J., Cobb, S. V., Eastgate, R. M., Gibson, I., & Smith, P. A. (1992). Research Applications of Virtual Reality. *Interactive Learning International*, 8(2), 161-163.
- Brown, D. J., Cobb, S. V., Eastgate, R. M., Gibson, I., & Smith, P. A. (1992, April). Research Applications of Virtual Reality. *Interactive Learning International*, 8(2), 161-163.
- Brown, M. H., & Najork, M. A. (1993). Algorithm Animation Using 3D Interactive Graphics. In *Proceedings of the UIST '93 - The Sixth Annual Symposium on User Interface Software and Technology*, (pp. 93-100). : ACM Press.
- Brown, D. J. (1993). Virtual Reality, Virtually Unlimited. *British Journal of Special Education*, 20(1), 12.
- Brown, D. J., Cobb, S. V., Eastgate, R. M., & Wilson, J. R. (1993). Desktop VR as a Practical Tool in Industry and Education. In *Proceedings of the VR '93 Virtual Reality International 93, The Third Annual Conference on Virtual Reality*, (pp. 111-121). : Meckler.
- Brown, D. J., Cobb, S. V. G., & Eastgate, R. M. (1993). Virtual Reality as a Tool to Teach Makaton Symbols to Children with Learning and Motor Skills Difficulties (internal report VIRART/93/101): Nottingham, UK: University of Nottingham, Virtual Applications Research Team, Department of Manufacturing Engineering and Operations Management.
- Brown, J. M. (1994). Tri-Dimensional Vision: An Intelligence Officers Perspective. In *Proceedings of the Virtual Reality and Medicine: The Cutting Edge*, (pp. 101-103). : SIG-Advanced Applications, Inc.
- Brown, J. M., & Colgate, J. E. (1994). Physics-Based Approach to Haptic Display. In *Proceedings of the ISMCR '94: Topical Workshop on Virtual Reality*, (pp. 101-106). : NASA.
- Brown, D. J. (1994). Special computers for special children. *Open Learning Systems News*, 49, 7-8.
- Brown, J. R., Earnshaw, R., Jern, M., & Vance, J. (1995). Visualization. New York, NY: John Wiley & Sons.
- Brown, D. J., & Wilson, J. R. (1995). LIVE: Learning in Virtual Environments. Ability: The Journal of the British Computer Society, 15, 24-25.
- Brown, D. J., Stewart, D. S., & Wilson, J. R. (1995). Ethical Pathways to Virtual Learning. In *Proceedings of the Virtual Reality and Persons with Disabilities*, (pp. unpaginated). : CSUN Center on Disabilities.
- Brown, D. J. (1995). Learning in Virtual Environments (LIVE). In J. Vince & R. Earnshaw (Eds.), *Virtual Reality Applications*, (pp. 245-252). London, UK: Academic Press.
- Brown, D. J., Kerr, S. J., & Wilson, J. R. (1997). VE in special needs education: The LIVE programme at the University of Nottingham. *Communications of the ACM*, in press.

Brown, D. J., Cobb, S. V., Eastgate, R. M., & Wilson, J. R. (1997). Desktop VR as a practical tool in industry and education. In Proceedings of the Virtual Reality Universe '97, (pp. 111-121). : AMA, Inc.

Brown, D. J., Kerr, S. J., & Eynon, A. (1997). New advances in virtual environments for people with special needs. Ability: The Journal of the British Computer Society Disability Group, in press, in press.

Browning, J., & Barrett, P. (1993, December). Hype or Hyper-reality? Focus, 22-29.

Bruckman, A. (1992). Identity Workshop: Social and Psychological Phenomena in Text-Based Virtual Reality : Cambridge, MA: MIT.

Bruckman, A., & Resnick, M. (1995). The MediaMOO Project: Constructionism and Professional Community. Convergence, 1(1), 94-109.

Bruckman, A. (1995). Cyberspace is Not Disneyland: The Role of the Artist in a Networked World : Commissioned by the Getty Art History Information Program.

Bruckman, A. (1996). Finding One's Own Space in Cyberspace. Technology Review, 48-54.

Bruckman, A. (1997). MOOSE Crossing: Construction, Community, and Learning in a Networked Virtual World for Kids. Unpublished PhD Dissertation, Cambridge, MA: Massachusetts Institute of Technology, MIT Media Lab.

Brunner, B., Arbter, K., Hirxinger, G., & Koeppel, R. (1995). Programming Robots via Learning by Showing in a Virtual Environment. In Proceedings of the Virtual Reality World '95, (pp. 63-72). : IDG Conferences and Seminars.

Brutzman, D. P., Kanayama, Y., & Zyda, M. J. (1992). Integrated Simulation for Rapid Development of Autonomous Underwater Vehicles. In Proceedings of the 1992 Symposium on Autonomous Underwater Vehicle Technology, AUV '92, (pp. 3-10). : IEEE.

Brutzman, D. P. (1994). A Virtual World for an Autonomous Underwater Vehicle. Unpublished Doctoral, Naval Postgraduate School, Monterey, California.

Brutzman, D. P., Macedonica, M. R., & Zyda, M. J. (1995). Internetwork Infrastructure Requirements for Virtual Environments. In Proceedings of the 1995 Symposium on the Virtual Reality Modeling Language (VRML '95), (pp. 95-104). : ACM.

Brutzman, D. P. (1996). Graphics Internetworking: Bottlenecks and Breakthroughs. In C. Dodsworth (Ed.), Digital Illusions, (pp. unpaginated). Reading, MA: Addison-Wesley.

Bryson, S., & Fisher, S. S. (1990). Defining, Modeling, and Measuring System Lag in Virtual Environments. In Proceedings of the Stereoscopic Displays and Applications, (pp. 98-109). : SPIE.

Bryson, S. (1992). Measurement and Calibration of Static Distortion of Position Data from 3D Trackers. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 244-255). : SPIE.

Bryson, S. (1992). Virtual Environments in Scientific Visualization. In Proceedings of the 37th Annual IEEE International Computer Conference - COMPCON Spring '92, (pp. 460-461). : IEEE.

- Bryson, S., & Levit, C. (1992). A Virtual Environment for the Exploration of Three-Dimensional Steady Flows. In Proceedings of the Virtual Worlds: Real Challenges - Papers from SRI's 1991 Conference on Virtual Reality, (pp. 5-14). : Meckler Publishing.
- Bryson, S., & Gerald, Y. M. (1992). The Distributed Virtual Windtunnel. In Proceedings of the Supercomputing '92, (pp. 275-284). : IEEE.
- Bryson, S., & Levit, C. (1992 July). The Virtual Wind Tunnel. *IEEE Computer Graphics and Applications*, 12, 25-34.
- Bryson, S. (1993). The Virtual Wind Tunnel: A High-Performance Virtual Reality Application. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 20-26). : IEEE Service Center.
- Bryson, S. (1993). The Virtual Windtunnel: Visualizing Modern CFD Datasets with Virtual Environments. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 390-395). : NASA.
- Bryson, S. T. (1993). Effects of Lag and Frame Rate on Various Tracking Tasks. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 155-166). : SPIE.
- Bryson, S. (1993 (November/December)). Virtual Reality in Scientific Visualization. *Computers and Graphics*, 17(6), 679-685.
- Bryson, S. (1994). Approaches to the Successful Design and Implementation of VR Systems. In Proceedings of the ACM SIGGRAPH 1994, (pp. 9:1-9:11). : ACM.
- Bryson, S. (1994). Designing a Virtual Reality Application. In Proceedings of the ACM SIGGRAPH 1994, (pp. 4:1-4:21). : ACM.
- Bryson, S. (1994). Run-Time Architectures and Time Management for Unsteady Interactive Visualization Environments. In Proceedings of the ACM SIGGRAPH 1994, (pp. 10:1-10:9). : ACM.
- Bryson, S. (1994). Virtual Environments in Scientific Visualization. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 201-222). : World Scientific Publishing Company.
- Bryson, S. (1996). Virtual Reality in Scientific Visualization. *Communications of the ACM [special issue on Virtual Reality Software and Technology]*, 39(5), 62-71.
- Bryson, S., Johan, S., & Schlect, L. (1997). An Extensible Interactive Visualization Framework for the Virtual Windtunnel. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 106-113). : IEEE Computer Society Press.
- Bucher, U. (1992). Angular Relation of Axes in Perceptual Space (N92223478XSP): Springfield, VA: NTIS.
- Buckert-Donelson, A. (1994). Profile: Beth Marcus, PH. D. of Exos Corp. *Virtual Reality World*, 2(5), 26-31.
- Buckert-Donelson, A. (1994 May). VR People Profile: Mark Long of Zombie, Inc. *Virtual Reality World*, 2(3), 35-39.
- Buckert-Donelson, A. (1995). Linda Rhoades, Virtual I/O: Experienced in Developing Strategic Business Alliances. *VR World*, 3(3), 34-39.
- Buckert-Donelson, A. (1995 August). VR People: Creves Maples, Sandia National Labs. *VR World*, 3(4), 25-30.
- Buckwalter, J. G., & Rizzo, A. A. (1996). Virtual Reality and the Neuropsychological Assessment of Persons with Neurologically Based Cognitive

- Impairments. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 17-21). Washington, DC: IOS Press.
- Buenting, J. E., Spencer, E. B., & Holmes, D. K. (1996). Internet Image Database: Development and Implementation. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 591-597). Washington, DC: IOS Press.
- Bukowski, R. W., & Sequin, C. H. (1995). Object Associations: A Simple and Practical Approach to Virtual 3D Manipulation. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 131-138). : ACM.
- Bullemer, P. T., Chu, R. W., Kodali, N., & Villano, M. (1993). The Home and Building Control Fundamental Tutor: A Design Framework for Multimedia Instruction of Declarative Concepts. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 58). : NASA.
- Bullinger, H. J., Froschle, H. P., Riedel, O., & Rossler, A. (1995). Advanced Concepts for Distributed Rehabilitation. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 53-59). Amsterdam: IOS Press.
- Bullinger, H. J., Riedel, O., & Robler, A. (1995). Virtual Reality as a Focal Point between New Media and Telecommunication. In Proceedings of the Virtual Reality World '95, (pp. 11-18). : IDG Conferences and Seminars.
- Bullinger, H. J., Fahnrich, K. P., & Weisbecker, A. (1996). GENIUS: generating software-ergonomic user interfaces. International Journal of Human-Computer Interaction, 8(2), 115-144.
- Bullinger, H. J., & Heger, R. (1997). Interactive assembly planning in a virtual environment. ZWF (Zeitschrift fur Wirtschaftlichen Fabrikbetrieb), 92(3), 92-95.
- Burdea, G., Zhuang, J., Roskos, E., Silver, D., & Langrana, N. (1992). A Portable Dextrous Master with Force Feedback. Presence: Teleoperators and Virtual Environments, 1(1), 18-28.
- Burdea, G., Roskos, E., Silver, D., Thibaud, F., & Wolpov, R. (1992). A Distributed Virtual Environment with Dextrous Force Feedback. In Proceedings of the Informatique '92, International Conference Interface to Real and Virtual Worlds., (pp. 255-265). : EC2.
- Burdea, G., & Coiffet, P. (1993). Virtual Reality Technology. New York, NY: John Wiley & Sons.
- Burdea, G. C. (1995). Research on Portable Force Feedback Masters for Virtual Reality. In Proceedings of the Virtual Reality World '95, (pp. 317-324). : IDG Conferences and Seminars.
- Burdea, G., Gomex, D., Langrana, N., Roskos, E., & Richard, P. (1995). Virtual Reality Graphics Simulation with Force Feedback. International Journal in Computer Simulation, 5(3), 287-303.
- Burdea, G., Goratowski, R., & Langrana, N. (1995). Tactile and Force Sensing for Computerized Hand Diagnosis. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 60-70). Amsterdam: IOS Press.
- Burdea, G. C., Goratowski, R., & Langrana, N. (1995). A Tactile Sensing Glove for Distributed Rehabilitation. Journal of Medicine and Virtual Reality, 1(1), 40-44.

- Burdea, G. (1996). Force and Touch Feedback for Virtual Reality. New York: John Wiley & Sons, Inc.
- Burdea, G., Richard, P., & Coiffet, P. (1996). Multimodal virtual reality: Input-output devices, system integration, and human factors. International Journal of Human-Computer Interaction, 8(1), 5-24.
- Burdea, G., Deshpande, S., Popescu, V., Langrana, N., Gomez, D., DiPaolo, D., & Kanter, M. (1996). Computerized Hand Diagnostic/Rehabilitation System Using a Force Feedback Glove. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 141-150). Washington, DC: IOS Press.
- Burdea, G., Deshpande, S., Liu, B., Langrana, N., & Gomez, D. (1997). A Virtual Reality-Based System for Hand Diagnosis and Rehabilitation. Presence: Teleoperators and Virtual Environments, 6(2), 229-240.
- Burg, J., Hughes, C. E., & Lisle, C. (1991). Behavioral Representation in Virtual Reality. In Proceedings of the Behavioral Representation Symposium,). : Institute for Simulation and Training.
- Burke, R. R. (1996). Virtual Shopping: Breakthrough in Marketing Research. Harvard Business Review, 74(2), 120-131.
- Burrow, M. (1994). A Telemedicine Testbed for Developing and Evaluating Telerobotic Tools for Rural Health Care. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 15-18). : Aligned Management Associates.
- Busquets, A. M., Williams, S. P., & Parrish, R. V. (1990). Effect on Real-World Depth Perception from Exposure to Heads-Down Stereoscopic Flight Displays. In Proceedings of the Stereoscopic Displays and Applications, (pp. 44-53). : SPIE.
- Buss, M., & Hashimoto, H. (1993). Intelligent Cooperative Manipulation Using Dynamic Force Simulator. In Proceedings of the Third International Conference on Artificial Reality and Tele-Existence, ICAT '93, (pp. 111-120). : Japan Technology Transfer Association.
- Butler, W. G., Laferriere, R. R., & Djang, P. A. (1993). Training Mix Model. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 352-360). : NASA.
- Butterworth, J., Davidson, A., Hench, S., & Olano, M. (1992). 3DM: A Three Dimensional Modeler Using a Head-Mounted Display. In Proceedings of the 1992 Symposium on Interactive 3D Graphics, (pp. 135-138). : ACM.
- Buttolo, P., Braathen, P., & Hannaford, B. (1994). Sliding Control of Force Reflecting Teleoperation: Preliminary Studies. Presence: Teleoperators and Virtual Environments, 3(2), 158-172.
- Buttolo, P., & Hannaford, B. (1995). Pen-Based Force Display for Precision Manipulation in Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 217-225). : IEEE Computer Society Press.
- Buttolo, P., Kung, D., & Hannaford, B. (1995). Manipulation in Real, Virtual and Remote Environments. In Proceedings of the 1995 IEEE International Conference on Systems, Man and Cybernetics, (pp. 4656-4561). : IEEE.
- Buttolo, P., Oboe, R., Hannaford, B., & McNeely, W. (1996). Force Feedback in Shared Virtual Simulations. In Proceedings of the MICAD,). : .

- Bylinsky, G. (1991). The Marvels of 'Virtual Reality'. *Fortune*, 123(11), 138-153.
- Byrne, C. (1992, Winter). Students explore VR technology. *HIT Lab Review*, 6-7.
- Byrne, C. (1993). Virtual Reality and Education (HITL Report No. R-93-2): Seattle, WA: University of Washington, Human Interface Technology Laboratory.
- Byrne, C., & Furness, T. A., III. (1994). Virtual Reality and Education. In Proceedings of the IFIP WG3.5 - International Working Conference on Exploring a New Partnership: Children, Teachers and Technology, (pp. A-58). : Elsevier, North-Holland.
- Byrne, C., Holland, C., Moffit, D., Hodas, S., & Furness, T. (1994). Virtual Reality and "At Risk" Students (HITL Technical Report No. R-94-5): Seattle, WA: University of Washington, Human Interface Technology Laboratory.
- Byrne, C., Furness, T., & Winn, W. D. (1995). The use of virtual reality for teaching atomic/molecular structure. In Proceedings of the 1995 Annual Meeting of the American Educational Research Association, (pp. unpaginated). : AERA.
- Byrne, C. M. (1996). Water on tap: The Use of Virtual Reality as an Educational Tool. Unpublished PhD. Dissertation, Seattle, WA: University of Washington, department of Industrial Engineering.
- Cahill, V., Condon, A., Kelly, D., McGerty, S., O-Connell, K., Starovic, G., & Tangney. (1995). The VOID Shell Specification (Technical TCD-CS-95-20): Distributed Systems Group, Computer Science Department, Trinity College Dublin.
- Cahill, V. (1996). An overview of the Tigger object-support operating system framework. In Proceedings of the SOFSEM '96: Theory and Practice of Informatics, the 23rd Seminar on Current Trends in Theory and Practice of Informatics, (pp. 34-55). : Springer-Verlag.
- Caird, J. K., & Hancock, P. A. (1994). The Effect of Static and Dynamic Whole-Hand Gestures on the Perception of Grasped Size in a Virtual Environment. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 965). : Human Factors and Ergonomics Society.
- Caird, J. K. (1996). Persistent issues in the application of virtual environment systems to training. In Proceedings of the HICS'96: the Third Annual Symposium on Human Interaction with Complex Systems, (pp. 124-132). : IEEE Computer Society Press.
- Calvert, S. L., & Tan, S.-L. (1994). Impact of Virtual Reality on Young Adults' Physiological Arousal and Aggressive Thoughts: Interaction Versus Observation. *Journal of Applied Developmental Psychology*, 15(1), 125-139.
- Calvin, J., Dickens, A., Gaines, B., Metzger, P., Miller, D., & Owen, D. (1993). The Simnet Virtual World Architecture. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 450-455). : IEEE Service Center.
- Camargo-Silva, P. (1996). A Logic for Networked Virtual World. In Proceedings of the Cybernetics and Systems '96, the Thirteenth European Meeting on Cybernetics and Systems Research, (pp. 934-939). : Austrian Society of Cybernetic Studies.
- Cameron, A. A., Trythall, S., & Barton, A. M. (1995). Helmet trackers--the future. In Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements II, (pp. 281-295). : SPIE.
- Cameron, B. M., Manuca, A., & Robb, R. A. (1996). Patient-Specific Anatomic Models: Geometric Surface Generation from Three-Dimensional Medical Images Using a Specified Polygonal Budget. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.),

- Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 447-460). Washington, DC: IOS Press.
- Campbell, D. A. (1996). The Nature of Cyberspace on "Vers Une Architecture Virtuelle...". CRIT: The Journal of the American Institute of Architecture Students, 35, 26-28.
- Cannon, D. J., & Thomas, G. (1997). Virtual Tools for Supervisory and Collaborative Control of Robots [includes Addendum]. *Presence: Teleoperators and Virtual Environments*, 6(1), 1-28.
- Canterbury, M. (1995). An Automated Approach to Distributed Interactive Simulation (DIS) Protocol Entity Development. Unpublished Masters, Naval Postgraduate School, Monterey, California.
- Capin, T. K., Noser, H., Thalmann, D., Pandzic, I. S., & Thalmann, N. M. (1997). Virtual Human Representation and Communication in VLNet. *IEEE Computer Graphics and Applications* [special issue: 3D and Multimedia on the Information Superhighway], 17(2), 42-53.
- Capin, T. K., Thalmann, D., Pandzic, I. S., & Thalmann, N. M. (1997). A Dead-Reckoning Algorithm for Virtual Human Figures. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 161-169). : IEEE Computer Society Press.
- Caracciolo, R., Fanton, F., & Gasparetto, A. (1994). Surface Matching for Correlation of Virtual Models: Theory and Application. In Proceedings of the ISMCR '94: Topical Workshop on Virtual Reality, (pp. 76-84). : NASA.
- Carande, R. (1993). Information Sources for Virtual Reality: A Research Guide. Westport, CT: Greenwood Press.
- Carlile, S. (1996). Virtual Auditory Space: Generation and Applications. New York, NY: Chapman & Hall.
- Carlile, S. (1996). Auditory Space. In S. Carlile (Ed.), *Virtual Auditory Space: Generation and Applications*, (pp. 1-25). New York, NY: Chapman & Hall.
- Carlile, S. (1996). The Physical and Psychophysical Basis of Sound Localization. In S. Carlile (Ed.), *Virtual Auditory Space: Generation and Applications*, (pp. 27-78). New York, NY: Chapman & Hall.
- Carlsson, C., & Fahlen, L. E. (1993). Integrated CSCW Tools Within a Shared 3D Environment. In Proceedings of the INTERCHI '93, (pp. 513). : Addison-Wesley.
- Carlsson, C., & Hagasand, O. (1993). The Distributed Interactive Virtual Environments: Architecture and Applications. In Proceedings of the IEE Colloquim on 'Distributed Virtual Reality', (pp. 3/1-3). : IEE.
- Carlsson, C., & Hagasand, O. (1993). DIVE: a Multi User Virtual Reality System. In Proceedings of the VRAIS 93, (pp. 394- 400). : IEEE.
- Carlsson, C., & Hagasand, O. (1993 November/December). Dive - A Platform for Multi-User Virtual Environments. *Computers and Graphics*, 17(6), 663-669.
- Carlsson, C., & Jää-Aro, K.-M. (1995). The DIVE Laboratory. *Presence: Teleoperators and Virtual Environments*, 4(4), 431-440.
- Carmein, D. E. E. (1995). Omni-directional treadmill, U.S. Patent Server Database, : none.
- Carmein, D. E. E. (1996). Omni-directional treadmill, Patent Server, . U.S.A.: none.

Carr, C. (1992, October). Is Virtual Reality Virtually Here? Training and Development, 46(10), 36-41.

Carr, K. T. (1993). Stereo Visual Information and Mental Rotation Tasks [Abstract]. Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians, 13(4), 434-440.

Carr, K. T., & England, R. D. (1993). The Role of Realism in Virtual Reality. In Proceedings of the VR '93 Virtual Reality International 93: The Third Annual Conference on Virtual Reality, (pp. 24-33). : Meckler.

Carr, K., & England, R. (1995). Simulated and Virtual Realities. Hampshire, UK: Taylor & Francis.

Carter, W. (1992). The Advantage of Single Lens Stereopsis. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 204-210). : SPIE.

Cartwright, G. F. (1994 March-April). Virtual or Real? The Mind in Cyberspace. The Futurist: A Journal of Forecast, Trends, and Ideas about the Future, 28(2), 22-26.

Casarelli, G. C., Strobino, G., Daturi, E., Caranna, C., Bittanti, R., & Lazzari, A. (1993). A virtual teaching laboratory for the supervision and control of industrial processes. In Proceedings of the DIDAMATICA '93. Informatica per la Didattica Atti, (pp. 466-478). : A.I.C.A.

Cash, D. (1993). Touching is Believing: Work on Virtual Reality Involving Touch. Technology Review, 96(6), 9.

Cassell, J., Pelachaud, C., Badler, N., Steedman, M., Achorn, B., Becket, T., Douville, B., Prevost, S., & Stone, M. (1994). Animated conversation: Rule-based generation of facial expression, gesture and spoken intonation for multiple conversational agents. In Proceedings of the SIGGRAPH 94, (pp. 413-420). : ACM.

Cater, J. P. (1994). Smell/taste: odors in reality. In Proceedings of the 1994 IEEE International Conference on Systems, Man, and Cybernetics: Humans, Information and Technology, (pp. 1781). : IEEE.

Cater, J. P., & Huffman, S. D. (1995). Use of the Remote Access Virtual Environment Network (RAVEN) for Coordinated IVA-EVA Astronaut Training and Evaluation. Presence: Teleoperators and Virtual Environments, 4(2), 103-109.

Caudell, T. P., & Mizell, D. W. (1991). Augmented Reality: An Application of Heads-Up Display Technology to Manual Manufacturing Processes. In Proceedings of the Twenty-Fifth Hawaii International Conference on System Sciences, (pp. 659-669). : IEEE Computer Society Press.

Caudell, T. P., Janin, A. L., & Johnson, S. K. (1993). Neutral Modeling of Face Animation for Telecommuting in Virtual Reality. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 478-485). : IEEE Service Center.

Caudell, T. P. (1994). Application of Neural Networks to Virtual Reality. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 26-31). : IEEE Service Center.

Caudell, T. P. (1994). Introduction to augmented and virtual reality. In Proceedings of the Telemanipulator and Telepresence Technologies, (pp. 272-281). : SPIE.

Caudell, T. P. (1995 winter). A Virtual Environment Interface to Complex Autonomous Perceptual Systems. The International Journal of Virtual Reality, 1(1), 9-21.

- Ceresole, E., Dal Sasso, M., & Rossi, A. (1994). Multimodal Correlation and Intraoperative Matching of Virtual Models in Neurosurgery. In Proceedings of the ISMCR '94: Topical Workshop on Virtual Reality, (pp. 27-30). : NASA.
- Chalmers, M. (1996). Using Usage Data in Collaborative Information Environments. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Chanezon, A., Takemura, H., Kitamura, Y., & Kishino, F. (1993). A Study of an Operator Assistant for Virtual Space. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 492-498). : IEEE Service Center.
- Chang, C. K., Al-Salqan, Y. Y., DeFanti, T. A., Ramakrishnan, R., & Cheoul, S. K. (1992). Scientific Visualization: A Performance Study of CSMA/CD with Connected Data Links (Hybrid Ethernet). In Proceedings of the Third Workshop on Future Trends of Distributed Computing Systems, (pp. 389-394). : IEEE Computer Society Press.
- Chang, S., Tan, H., Eberman, B., & Marcus, B. (1993). Sensing, Perception and Feedback for VR. In Proceedings of the Virtual Reality Systems, Fall '93 Conference, (pp. 1-5). : SIG-Advanced Applications, Inc.
- Chapin, W. L., & Foster, S. H. (1992). Virtual Environment Display for a 3D Audio Room Simulation. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 256-267). : SPIE.
- Chapman, D., & Ware, C. (1992). Manipulating the Future: Predictor Based Feedback for Velocity Control in Virtual Environment Navigation. In Proceedings of the 1992 Symposium on Interactive 3D Graphics, (pp. 63-66). : ACM.
- Chapnick, P. (1993, July). 2D Reading on 3D Subjects. *AI Expert*, 43-467.
- Chapnick, P., & Vikoren, S. (1994). Books: VR Becomes Actual Reality. *Virtual Reality Special Report*, 1, 27-32.
- Chen, D. T., & Zeltzer, D. (1992). Pump It Up: Computer Animation of a Biomechanically Based Model of Muscle Using the Finite Element Method. *Computer Graphics*, 26(2), 89-98.
- Chen, D. (1992). Surgical Simulation Models: From Body Parts to Artifical Person. In Proceedings of the 1992 IMAGE Conference VI, (pp. 283-294). : IMAGE Society.
- Chen, D. T., Pieper, S. D., Singh, S. K., Rosen, J. M., & Zeltzer, D. L. (1993). The Virtual Sailor: An Implementation of Interactive Human Body Modeling. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 429-435). : IEEE Service Center.
- Chen, J., Van Veen, B. D., & Hecox, K. E. (1993). Synthesis of 3D Virtual Auditory Space via a Spatial Feature Extraction and Regularization Model. In Proceedings of the IEEE Virtual Reality Annual International Symposium, VRAIS '93, (pp. 188-193). : IEEE Service Center.
- Chen, J., Moshell, J. M., Hughes, C. E., Blau, B., & Xin, L. (1994). Distributed Virtual Environment Real-Time Simulation Network. *Advances in Modelling & Analysis B*, 31(1), 1-7.
- Chen, D. T., State, A., & Banks, D. (1995). Interactive Shape Metamorphosis. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 43-44). : ACM.
- Chen, L.-Y., Fujimoto, H., & Suzuki, Y. (1995). Robot Teaching with Operating Stick Using the Virtual Reality System. In Proceedings of the RO-MAN '95, IEEE

International Workshop on Robot and Human Communication, (pp. 345-350). : IEEE Service Center.

Chen-Jinxiong, Moshell, J. M., Hughes, C. E., Blau, B., & Xin-Li. (1994). Distributed Virtual Environment Real-Time Simulation Network. Advances in Modelling and Analysis, 31(1), 1-7.

Cherny, L. (1995). The MUD Register: Conversational Modes of Action in a Text-Based Virtual Reality. Unpublished PhD dissertation, Stanford University.

Chevrier, C. (1996). Handling Interactions between Real and Virtual Worlds. In Proceedings of the Computer Graphics International, (pp. 74-83). : IEEE Computer Society Press.

Chi, D. M., Kokkevis, E., Ogunyemi, O., Bindiganavale, R., Hollick, M. J., Clarke, J. R., Webber, B. L., & Badler, N. I. (1996). Simulated Casualties and Medics for Emergency Training. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 486-494). Washington, DC: IOS Press.

Chi, D. M., Clarke, J. R., Webber, B. L., & Badler, N. I. (1996). Casualty Modeling for Real-Time Medical Training. Presence: Teleoperators and Virtual Environments, 5(4), 359-366.

Chignell, M. H., Poblete, F., & Zuberec, S. (1993). An Exploration in the Design Space of Three-Dimensional Hierarchies. In Proceedings of the Human Factors and Ergonomics Society 39th Annual Meeting: Designing for Diversity, (pp. 333-337). : Human Factors Society.

Child, T. (1993). Distributed VR. In Proceedings of the IEE Colloquium on 'Distributed Virtual Reality', (pp. 5/1, 4). : IEE.

Chin, G., Rosson, M. B., & Carroll, J. M. (1997). Participatory Analysis: Shared Development of Requirements from Scenarios. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 162-169). : ACM, Inc.

Chiou, G.-F. (1995). Learning Rationales and Virtual Reality Technology in Education. Journal of Educational Technology Systems, 23(4), 327-336.

Chrislip, C. A., & Ehlert, J. F., Jr. (1995). Level of Detail Model for Dismounted Infantry in NPSNET, IV.8.1. Unpublished Masters, Naval Postgraduate School, Monterey, California.

Christel, M. (1992, July/August). Virtual Reality Today on a PC. Instruction Delivery Systems, 6(4), 6-9.

Christensen, J. P. (1994). Bringing Telematics into Health Care in the European Communities. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 21-23). : Aligned Management Associates.

Christensen, J. P. (1995). Telematics Applications Programme (particularly Health Care Telematics) and Some Words on Virtual Reality. In Proceedings of the Virtual Reality World '95, (pp. 139-140). : IDG Conferences and Seminars.

Christensen, J. P. (1995). Telematics Applications Program: A Shift of Paradigm. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 70-71). Amsterdam: IOS Press.

- Chrysanthou, Y., & Slater, M. (1995). Shadow Volume BSP Trees for Computation of Shadows in Dynamic Scenes. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 45-50). : ACM.
- Chu, R. W., & Villano. (1993). Application of Knowledge Space Theory for Student Modeling. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 92). : NASA.
- Chu, C.-C. P., Dani, T. H., & Gadh, R. (1996). A Multimodal Interface for Virtual Reality Based CAD System. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 96-101). : Queen Mary & Westfield College.
- Chung, J. C., Harris, M. R., Brooks, F. P., Fuchs, H., Kelley, M. T., Hughes, J., Ouh-young, M., Cheung, C., Holloway, R. L., & Pique, M. (1989). Exploring Virtual Worlds with Head-Mounted Displays. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 42-52). : SPIE.
- Chung, K., & Wang, W. (1996). Quick Collision Detection of Polytopes in Virtual Environments. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 125-132). : ACM.
- Chung, K., & Wang, W. (1996). Quick Elimination of Non-Interference Polytopes in Virtual Environments. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 64-73). : SpringerWien.
- Churbuck, D. C. (1992). Applied Reality. Virtual Reality Becomes an Industrial Tool. *Forbes*, 150(6), 486-492.
- Cicognani, A. (1996). A Language of Design for a Virtual Community [poster]. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Cirincione, J. (1994). Softworld 2.1: The Imperial Message. In Proceedings of the SIGGRAPH '94, (pp. 190-191). : ACM SIGGRAPH.
- Ciscon, L. A., Wise, J. D., & Johnson, D. H. (1994). A Distributed Data Sharing Environment for Telerobotics. *Presence: Teleoperators and Virtual Environments*, 3(4), 321-340.
- Clancey, W. J. (1993). Situated action: A neuropsychological interpretation: Response to Vera and Simon. *Cognitive Science*, 17, 87-116.
- Clark, R. S. (1993, August). Virtual Reality: A World of Applications. *OE Reports*(116), 1, 6.
- Clark, R. S. (1993, September). Virtual Worlds Face the Markets of the Future. *OE Reports*(117).
- Clarke, W. S. (1994 May). The Design of Virtual Environments: Value Added Entertainment. *Computer Graphics*, 28(2), 102-104.
- Clarke, T. (1994, January). Keeping Your Virtual Feet on the Ground. *PCVR Magazine*(13), 13-19.
- Clerk, M. R. (1996). Frontiers in User Interface Design: Wearable Computers. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 302-305). : SPIE.
- Cloyd, D. W. (1994). Laparoscopic Lumbar Discectomy. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary

Applications for Simulation Visualization Robotics, (pp. 24-25). : Aligned Management Associates.

Clymer, M., & Graves, G. (1994). New Approaches in Magnetic Sensing for Tracking Devices. In Proceedings of the Stereoscopic Display and Virtual Reality Systems: The Engineering Reality of Virtual Reality, (pp. 288-296). : SPIE.

Cobb, S. V. G., Brown, D. J., D'Cruz, M. D., Eastgate, R. M., Cope, N. J., & Wilson, J. R. (1994). First UK national survey on industrial applications of Virtual Reality. In Proceedings of the VR '94: London Virtual Reality Expo 94, the Fourth Annual Conference on Virtual Reality, (pp. 101-106). : Mecklermedia.

Cobb, S., Nichols, S., Ramsey, A., & Wilson, J. R. (1996). Health and Safety Implications of Virtual Reality: Results and conclusions from an experimental programme. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 154-162). : Queen Mary & Westfield College.

Cobb, S. V. G. (1997). Measurement of postural stability before and after immersion in a virtual environment. *Applied Ergonomics*, 28, in press.

Coble, J. M., Karat, J., & Kahn, M. G. (1997). Maintaining a Focus on User Requirements Throughout the Development of Clinical Workstation Software. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 170-177). : ACM, Inc.

Cochran, W. (1994). How Do I See Thee? Let Me Count the Ways. *Virtual Reality Special Report*, 1(3), 33-38.

Cochrane, P., Heatley, D. J. T., & Cameron, K. H. (1993). Telepresence--Visual Telecommunications into the Next Century. In Proceedings of the Fourth IEE Conference on Telecommunications, (pp. 175-180). : IEE.

Cockayne, W., Zyda, M., Barham, P., Brutzman, D., & Falby, J. (1996 July). The Laboratory for Human Interaction in the Virtual Environment. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 157-160). : ACM.

Coco, G. P. (1993). The Virtual Environment Operating System: Derivation, Function and Form. Unpublished Unpublished master of science thesis, Seattle, WA: College of Engineering, University of Washington.

Coco, G. P., & Lion, D. (1993). Experiences with Asynchronous Communication Models in VEOS, a Distributed Programming Facility for Uniprocessor LANs (Unpublished technical report): Seattle, WA: Human Interface Technology Laboratory.

Codella, C., Jalili, R., Koved, L., Lewis, J. B., Ling, D. T., Lipscomb, J. S., Rabenhorst, D. A., Wang, C. P., Norton, A., Sweeney, P., & Turk, G. (1992). Interactive Simulation in a Multi-Person Virtual World. In Proceedings of the CHI '92, (pp. 329-334). : ACM.

Codella, C. F., Jalili, R., Koved, L., & Lewis, J. B. (1993). A Toolkit for Developing Multi-User, Distributed Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '93, (pp. 401-407). : IEEE Service Center.

Codella, C. F., Jalili, R., Koved, L., & Lewis, J. B. (1993). A Development System for Multi-User, Distributed Virtual Environments. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 83). : NASA.

- Cohen, M., & Koizumi, N. (1992). Exocentric Control of Audio Imaging in Binaural Telecommunication. *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, E75-A(2), 164-170.
- Cohen, M. F., Painter, J., Mehta, M., & Ma, K. L. (1992). Volume Seedlings. In Proceedings of the 1992 Symposium on Interactive 3D Graphics, (pp. 139-146). : ACM.
- Cohen, M., Koizumi, N., & Aoki, S. (1992). Design and Control of Shared Conferencing Environments for Audio Telecommunication. In Proceedings of the ISMCR'92: the Second International Symposium on Measurement and Control in Robotics, (pp. 405-412). : Society of Instrument and Control Engineers of Japan.
- Cohen, M. (1992). Integrating Graphic and Audio Windows. *Presence: Teleoperators and Virtual Environments*, 1(4), 468-481.
- Cohen, M., & Koizumi, N. (1993). Audio Windows for Virtual Concerts. *Bulletin of JMACS (Japan Music and Computer Science Society)*, 47.
- Cohen, M., & Koizumi, N. (1993). Virtual Gain for Audio Windows. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 85-91). : IEEE Society Press.
- Cohen, M., Aoki, S., & Koizumi, N. (1993). Augmented Audio Reality: Telepresence/VR Hybrid Acoustic Environments. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 361-364). : IEEE.
- Cohen, J. (1994). Monitoring Background Activities. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 499-531). : Addison-Wesley Publishing Company.
- Cohen, M. (1994). Augmented Audio Reality: Design of a Spatial Sound GPS PGS. In Proceedings of the 2nd Annual International Conference on Virtual Reality and Persons with Disabilities, (pp. 32-36). : CSUN Center on Disabilities.
- Cohen, M. (1994). Using Audio Windows to Analyze Music. In Proceedings of the IWHT '94: International Workshop on Human Interface Technology, (pp. 78-84). : University of Aizu Human Interface Lab.
- Cohen, M., & Koizumi, N. (1994). Putting Spatial Sound Into Voicemail. In Proceedings of the NR'94: IEEE/IEICE International Workshop on Networked Reality in Telecommunications, (pp. 1-2). : IEEE COMSOC, IEICE.
- Cohen, M. (1994 winter). Cybertokyo: A Survey of Public VRtractions. *Presence: Teleoperators and Virtual Environments*, 3(1), 87-93.
- Cohen, J. D., Lin, M. C., Manocha, D., & Ponamgi, M. K. (1995). I-COLLIDE: An Interactive and Exact Collision Detection System for Large-Scale Environments. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 189-196). : ACM.
- Cohen, M., & Wenzel, E. M. (1995). The Design of Multidimensional Sound Interfaces. In I. T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 291-348). New York, NY: Oxford University Press.
- Cohen, M., & Koizumi, N. (1995). Audio Windows for Virtual Concerts I. In Proceedings of the ICAT/VRST: International Conference on Artificial Reality and Tele-existence, Conference on Virtual Reality Software and Technology, (pp. 253). : Japan Technology Transfer Association.
- Cohen, M., & Koizumi, N. (1995). Audio Windows for Virtual Concerts II. In Proceedings of the ICAT/VRST: International Conference on Artificial Reality and Tele-

existence, Conference on Virtual Reality Software and Technology, (pp. 254). : Japan Technology Transfer Association.

Cohn, M. B., Lam, M., & Fearing, R. S. (1992). Tactile Feedback for Teleoperation. In Proceedings of the Telemanipulator Technology, (pp. 240-254). : SPIE.

Cohn, D. (1993). Not Just Another Pretty Interface. CADalyst, 10(8), 52-55.

Cole, R. E., & Parker, D. L. (1989). Stereo TV Improves Manipulator Performance. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 18-27). : SPIE.

Cole, R. E., Merritt, J. O., Fore, S., & Lester, P. (1990). Remote Manipulator Tasks Impossible without Stereo TV. In Proceedings of the Stereoscopic Displays and Applications, (pp. 255-265). : SPIE.

Cole, R. E., & Ikehara, C. (1992). A Low Cost Helmet-Mounted Camera/Display System for Field Testing Teleoperator Tasks. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 228-235). : SPIE.

Cole, D. (1994). SMDK: Simulation-Space Mosaic of Mobile Data Sounds. In Proceedings of the SIGGRAPH '94, (pp. 178-179). : ACM SIGGRAPH.

Cole, D. M. (1995). Emergent Technologies from Human-Dolphin Interaction Research. In R. M. Satava, K. Morgan, & H. B. Sieburg (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 72-78). Amsterdam: IOS Press.

Coleman, J., Nduka, C. C., & Darzi, A. (1994). Virtual reality and laparoscopic surgery. British Journal of Surgery, 81(12), 1709-1711.

Coleman, J., Savchenko, A., Goettsch, A., Wang, K., Bono, P., Littlefield, R., & Macedonia, M. C. (1996). TeleInViVo: A Collaborative Volume Visualization Application. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 115-124). Washington, DC: IOS Press.

Coleman, J., Goettsch, A., Savchenko, A., Kollmann, H., Wang, K., Element, E., & Bono, P. (1996). TeleInViVo: Towards collaborative volume visualization environments. Computers & Graphics, 20(6), 801-811.

Colgate, J. E., Grafing, P. E., Stanley, M. C., & Schenkel, G. (1993). Implementation of Stiff Virtual Walls in Force-Reflecting Interfaces. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 202-208). : IEEE Service Center.

Colle, H. A., & Green, R. F. (1996). Introductory psychology laboratories using graphic simulations of virtual subjects. Behavior Research Methods, Instruments & Computers, 28(2), 331-335.

Colucci, W., & Chi, V. (1995). Computer Glasses: A compact, light weight and cost effective display for monocular and tiled wide field of view systems. In Proceedings of the Novel Optical Systems Design and Optimization, (pp. 61-70). : SPIE.

Compton, M. (1993). Virtual Fun. IRIS Universe(25), 36-39.

Conn, C., Lanier, J., Minsky, M., Fisher, S., & Druin, A. (1989). Virtual Environments and Interactivity: Windows to the Future. In Proceedings of the ACM SIGGRAPH, (pp. 7-18). : ACM SIGGRAPH.

Connacher, H. I., Jayaram, S., & Lyons, K. (1995). Virtual assembly design environment. In Proceedings of the Computers in Engineering 1995 and the 1995 Database Symposium, (pp. 875-885). : ASME.

- Conner, B. D., Snibbe, S. S., Herndon, K. P., Robbins, D. C., Zeleznik, R. C., & van Dam, A. (1992). Three Dimensional Widgets. In Proceedings of the 1992 Symposium on Interactive 3D Graphics, (pp. 183-186). : ACM.
- Constanzo, L. (1993). Walking Through Design. *Engineering*, 233(6), 13-15.
- Conway, M., Vogtle, L., & Pausch, R. (1994 summer). One-Dimensional Motion Tailoring for the Disabled: A User Study. *Presence: Teleoperators and Virtual Environments*, 3(3), 244-251.
- Conway, M. J., Burnette, T., Christiansen, K., Cosgrove, D., Hinckley, K., Newfield, D., Patten, J., Pierce, J., Shochet, J., Stearns, B., Viega, J., Williams, G., & Pausch, R. (1996). Alice: 3D Interactive Graphics Programming Made Easy. In Proceedings of the UIST '96 Demo Program for the ACM Symposium on User Interface Software and Technology, (pp. 7-8). : ACM.
- Cook, R. (1992). Serious Entertainment. *Computer Graphics World*, 15(5), 40-48.
- Cook, M. J. (1993). Curvature Discrimination with Low Resolution Computer Generated Imagery [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.
- Cooke, J. M., Zyda, M. J., Pratt, D. R., & McGhee, R. B. (1992). NPSNET: Flight Simulation Dynamic Modeling Using Quaternions. *Presence*, 1(4), 404-420.
- Cooper, P. (1992). The Navigator's Viewpoint. *Virtual Reality News*, 1(2), 1-5.
- Cooper, M., & Benjamin, I. (1994). Envisionments: Constructing Dramatic Virtual Worlds. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 251-266). : World Scientific Publishing Co, Inc.
- Cooper, M., & Benjamin, I. (1995). Actors, Performance and Drama in Virtual Worlds. In Proceedings of the CGI '95: Computer Graphics International 1995, (pp. 255-265). : Academic Press.
- Cooper, D. J. (1996). Picles/sup TM/: a simulator for "virtual world" education and training in process dynamics and control. *Computer Applications in Engineering Education*, 4(3), 207-15.
- Corbin, D. (1993). NPSNET: Environmental Effects for a Real-Time Virtual World Battlefield Simulator. Unpublished Master's, Monterey, CA: Naval Postgraduate School.
- Cordell, B. J. (1991). A Study of Learning Styles and Computer-Assisted Instruction. *Computers in Education*, 16(2), 175-183.
- Corliss, R. (1993). Virtual, man! *Time*, 142(18), 80-84.
- Cornell, R., Bailey, D., & Bollet, R. (1994). Virtual Reality: Therapeutic Tool or Time Bomb? *EMI: Educational Media International*, 31(4), 247-249.
- Cotin, S., Delingette, H., Bro-Nielsen, M., Ayache, N., Clément, J. M., Tassetti, V., & Marescaux, J. (1996). Geometric and Physical Representations for a Simulator of Hepatic Surgery. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 139-151). Washington, DC: IOS Press.
- Cotin, S., Delingette, H., & Ayache, N. (1996). Real time volumetric deformable models for surgery simulation. In Proceedings of the VBC '96: Visualization in Biomedical Computing, 4th International Conference, (pp. 535- 540). : Springer-Verlag.

- Coull, T. B. (1992). Texture-based Virtual Reality on a Desktop Computer. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 37-42). : Meckler.
- Coull, T. (1993). Virtual Reality and the Personal Computer: Bringing the Frontier Closer to Home. *Virtual Reality Systems*, 1(1), 16-17.
- Coull, T. (1993). VR Applications: From Wall Street to Virtual Museums. *Virtual Reality Systems*, 1(1), 9-10.
- Coull, T., & Rothman, P. (1993, August). Virtual Reality for Decision Support Systems. *AI Expert*, 22-25.
- Covington, J. H. (1994). Implementing An Open Ocean Theater in NPSNET. Unpublished Masters, Naval Postgraduate School, Monterey, California.
- Coyne, J. P. (1993). Virtual Reality and Relational Databases. *Virtual Reality World*, 1(3 and 4), 50-52.
- Cremer, J., Kearney, J., Bartelme, M., Booth, M., Evans, D., & Romano, R. (1995). Experiment Authoring for Virtual Driving Environments. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 160-170). New York, NY: SpringerWien.
- Cremer, J., Kearney, J., & Papelis, Y. (1996). Driving Simulation: Challenges for VR Technology. *IEEE Computer Graphics and Applications*, 16(5), 16-20.
- Cremer, J., Kearney, J., & Ko, H. (1996). Simulation and Scenario Support for Virtual Environments. *Computers & Graphics*, 20(2), 199-206.
- Cress, J. D., Hettinger, L. J., Cunningham, J. A., Riccio, G. E., McMillan, G. R., & Haas, M. W. (1996). An Initial Evaluation of a Direct Vestibular Display in a Virtual Environment. In Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting, (pp. 1131-1135). : Human Factors Society.
- Cress, J. D., Hettinger, L. J., Cunningham, J. A., Riccio, G. E., McMillan, G. R., & Haas, M. W. (1997). An Introduction of a Direct Vestibular Display into a Virtual Environment. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 80-86). : IEEE Computer Society Press.
- Criscione, P., Montani, C., Scanteni, R., & Scopigno, R. (1996). DiscMC: An Interactive System for Fast Fitting Isosurfaces on Volume Data. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 178-190). : SpringerWien.
- Croll, P. R. (1993). Safe, Fault-Tolerant and Deterministic Algorithms for Real-Time Control. *Control Engineering Practice*, 1(4), 629-634.
- Cromby, J. J., Standen, P. J., & Brown, D. J. (1995). Using Virtual Environments in Special Education. *VR in the Schools*, 1(3), 1-4.
- Cromby, J. J., Standen, P. J., Newman, J., & Tasker, H. (1996). Successful transfer to the real world of skills practised in a virtual environment by students with severe learning difficulties. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. 103-107). : University of Reading.
- Cromby, J. J., Standen, P. J., & Brown, D. J. (1996). The potentials of virtual environments in the education and training of people with learning disabilities. *Journal of Intellectual Disability Research*, 40(6), 489-501.

- Cross, R. A., & Hanson, A. J. (1994). Virtual reality performance for virtual geometry. In Proceedings of the Visualization '94, (pp. 156-63, CP17). : IEEE Computer Society Press.
- Crowe, M. X. (1994). An Applications-Oriented Approach to the Development of Virtual Environments. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 57-63). : NASA.
- Crowe, B. (1994). Pteranodon Sighting at SIGGRAPH '93. *Virtual Reality World*, 2(1), 4-10.
- Cruickshank, D. (1996). Information is a Place. *Experiential Computing: A Bridge between the Virtual and the Real*. Iris Universe, 36, 17-21.
- Crutcher, L., Lazar, A., Feiner, S., & Zhou, M. (1995). Managing networks through a virtual world. *IEEE Parallel and Distributed Technology*, 3(2), 4-13.
- Cruz-Neira, C., Sandin, D. J., Defanti, T. A., Kentyon, R. V., & Hart, J. C. (1992). The CAVE: Audio Visual Experience Automatic Virtual Environment. *Communications of the ACM*, 35(6), 64-72.
- Cruz-Neira, C., Leigh, J., Papka, M., Barnes, C., Cohen, S. M., Das, S., Engelmann, R., Hudson, R., Roy, T., Siegel, L., Vasilakis, C., DeFanti, T. A., & Sandin, D. J. (1993). Scientists in Wonderland: A Report on Visualization Applications in the CAVE Virtual Reality Environment. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 59-66). : IEEE Society Press.
- Cruz-Neira, C., Sandin, D. J., & DeFanti, T. A. (1993). Surround-Screen Projection-Based Virtual Reality: The Design and Implementation of the CAVE. In Proceedings of the SIGGRAPH 93, (pp. 135-142). : ACM.
- Cruz-Neira, C. (1996). A Look Behind the Scenes of Virtual Reality Applications. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 161-162). : ACM.
- Cruz-Neira, C., Langley, R., & Bash, P. A. (1996). VIBE: a Virtual Biomolecular Environment for Interactive Molecular Modeling. *Computers & Chemistry*, 20(4), 469-477.
- Curtis, W. D., Janin, A. L., & Zikan, K. (1993). Note on Averaging Rotations. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 377-386). : IEEE Service Center.
- Cutt, P. (1992). The Sense of Touch in Virtual Reality. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 43). : Meckler.
- Cutting, C. D., Taylor, R. H., Khorramabadi, D., & Larose, D. (1994). Use of a Robotic Vision System for Precision Execution of Craniofacial Surgical Procedures. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 27-28). : SIG-Advanced Applications, Inc.
- D'Cruz, M. D., Eastgate, R. M., & Wilson, J. R. (1996). Towards a structured methodology for industrial application of virtual reality. In Proceedings of the Virtual Reality World '96, (pp. unpaginated). : Mecklermedia.
- D'Cruz, M., Eastgate, R., & Wilson, J. R. (1997). A study into the issues involved when applying virtual environment technology to training applications. In Proceedings of the Virtual Reality Universe '97, (pp. unpaginated). : AMA, Inc.

Daane, S., Constantinou, P., & Hesselroth, G. (1995). A \$100 Surgical Simulator for the IBM PC. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 79-80). Amsterdam: IOS Press.

Dagit, C. (1995). Virtual Reality: VR is a Powerful Presentation Technology for Real Estate Sales. *VR World*, 3(4), 34-36.

Dai, F., & Göbel, M. (1994). Virtual prototyping: an approach using VR-techniques. In Proceedings of the Computers in Engineering 1994, (pp. 311-316). : ASME.

Dainghaus, R., Neugebauer, J.-G., & Schraft, R. D. (1995). The Programming of Automation Systems with Virtual Reality. In Proceedings of the Virtual Reality World '95, (pp. 83-8). : IDG Conferences and Seminars.

Daley, J. A. (1992 (March 26)). Hyper-NPSNET: A Virtual World with an Integrated 3-D Hypertext. , Monterey, CA: Naval Postgraduate School.

Dallas, W. J. (1994). A High-Speed Viewing Console for Diagnostic Radiology. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 26-29). : Aligned Management Associates.

Damarin, S. K. (1993, March). School and Situated Knowledge: Travel or Tourism? *Educational Technology*, 33(3), 27-32.

Damer, B., Kekenes, C., & Hoffman, T. (1996). Inhabited Digital Spaces. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 9-10). : ACM.

Darken, R., & Bergen, D. (1992). A Virtual Environment System Architecture for Large Scale Simulations. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 38-58). : Meckler Publishing.

Darken, R. P., & Sibert, J. L. (1993). A Toolset for Navigation in Virtual Environments. In Proceedings of the UIST '93 - The Sixth Annual Symposium on User Interface Software and Technology, (pp. 157-166). : ACM Press.

Darken, J. P., Sibert, J. L., & Shumaker, R. (1993). A Study of Navigation in Virtual Space. In Proceedings of the SOAR '93, (pp. 51-60). : NASA.

Darken, J. P. (1993). Naviagation and Orientation in Virtual Space. Unpublished Master's thesis, The George Washington University.

Darken, J. P., & Perez, M. A. (1993). Techniques for Navigating Large Graphs (Technical Report GWU-IIST-93-11): The George Washington University, Department of Electrical Engineering and Computer Science.

Darken, R. (1994). Hands-off Interaction with Menus in Virtual Spaces. In Proceedings of the Engineering Reality of Virtual Reality, (pp. 365-371). : SPIE.

Darken, J. P. (1994). Wayfinding in Large-Scale Virtual Worlds. In Proceedings of the ACM SIGCHI'95, (pp. 45-46). : ACM.

Darken, J. P., & Duckworth, A. (1994). Investigating Navigation Strategies in Virtual Worlds: A GOMS Analysis (NRL Technical Report number 5707-94-7471): Naval Research Laboratory.

Darken, J., Tonnesen, C., & Passarella-Jones, K. (1995). The bridge between developers and virtual environments: A robust virtual environment system architecture. In

Proceedings of the Stereoscopic Displays and Virtual Reality Systems !!, (pp. 234-240). : SPIE.

Darken, R. P., & Darken, C. J. (1996). VR + AI = Intelligent Environments: a Synergistic Approach to Engineering Design Support. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 292-300). : SPIE.

Darken, R. P., & Sibert, J. L. (1996). Wayfinding Strategies and Behaviors in Large Virtual Worlds. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 142-149). : ACM.

Darken, R. P., & Sibert, J. (1996). Navigating large virtual spaces. International Journal of Human-Computer Interaction, 8(1), 49-71.

Darken, R. P., & Sibert, J. L. (1996). Navigating in Large Virtual Worlds. The International Journal of Human-Computer Interaction, 8(1), 49-72.

Darken, J. P. (1996). Wayfinding in Large-Scale Virtual Worlds. Unpublished Doctoral dissertation, The George Washington University.

Darken, J. P., Hill, T. A., & Solan, B. T. (1996). A Hybrid Virtual Environment Interface to C31 Information (The 1996 NRL Review, pp. 181-182): Naval Research Laboratory.

Darton, E. (1994). Free City and the Art of Memory: The Novel as Artificial Reality. Leonardo, 27(4), 279-280.

Das, H., Zak, H., Kim, W. S., Bejczy, A. K., & Schenker, P. S. (1992). Operator Performance with Alternative Manual Control Modes in Teleoperation. Presence: Teleoperators and Virtual Environments, 1(2), 201-218.

Davies, C., & Harrison, J. (1996). Osmose: Towards Broadening the Aesthetics of Virtual Reality. Computer Graphics [Focus: "Real" Virtual Reality], 30(4), 25-28.

Davies, R., & Eriksson, J. (1996). An application of virtual reality to the adaptation and construction of environments for disabled people. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.

Davis, D. B. (1991). Reality Check: How Far Has Virtual Reality Technology Come, and Where Is It Going? Computer Graphics World, 14(6), 49-52.

Davis, E. T., Corso, G. M., Barfield, W., Corso, G., Eggleston, R. G., Ellis, S., Ribarsky, B., & Wickens, C. D. (1994). Human Perception and Performance in 3D Virtual Environments [Panel]. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 230-234). : Human Factors and Ergonomics Society.

Davis, E. T., & Hodges, L. F. (1995). Human Stereopsis, Fusion, and Stereoscopic Virtual Environments. In T. A. Furness & W. Barfield (Eds.), Virtual Environments and Advanced Interface Design, (pp. 145-174). New York, NY: Oxford University Press.

Davis, J. (1996). Appearance-Based Motion Recognition of Human Actions. Unpublished M.S. Thesis, Cambridge, MA: MIT.

De Groot, M. (1990). Virtual Reality: New Interface Technologies. UNIX Review, 8(8), 32-36.

de Leeuw, W., Post, F., & Vaatstra, R. W. (1996). Visualization of Turbulent Flow by Spot Noise. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 286-295). : SpringerWien.

De Moor, G. J. E. (1994). Standardization in Medical Informatics in Europe. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 30-33). : Aligned Management Associates.

De Silva, L. C., Miyasato, T., & Kishino, F. (1996). Emotion Enhanced Multimedia Meetings Using the Concept of Virtual Space Teleconferencing. In Proceedings of the International Conference on Multimedia Computing and Systems, (pp. 28-33). : IEEE Computer Society Press.

Deb, S., & Pal, A. (1995). Robot-Human Cooperation for Improved Orthopaedic Surgery. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 225-230). : IEEE.

DeCarlo, D., Kaye, J., Metaxas, D., Clarke, J. R., Webber, B., & Badler, N. (1995). Integrating Anatomy and Physiology for Behavior Modeling. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 81-87). Amsterdam: IOS Press.

Decety, J., & Jeannerod, M. (1995). Mentally simulated movements in virtual reality: Does Fitts's law hold in motor imagery? *Behavioural Brain Research*, 72(1-2), 127-134.

Dede, C., & Palumbo, D. (1991). Implications of Hypermedia for Cognition and Communication. *Impact Assessment Bulletin*, 9(1-2), 15-28.

Dede, C., Loftin, R. B., & Salzman, M. (1992). The Future of Multimedia: Bridging to Virtual Worlds. *Educational Technology*, 32(5), 54-60.

Dede, C., & Palumbo, D. (1992). Implications of Hypermedia for Cognition and Communication. *Impact Assessment Bulletin*, 9(1-2), 15-28.

Dede, C. J. (1993). Evolving from multimedia to virtual reality. In Proceedings of the ED-MEDIA 93 - World Conference on Educational Multimedia and Hypermedia, (pp. 123-130). : Association for the Advancement of Computer Education.

Dede, C. (1995). The evolution of constructivist learning environments: immersion in distributed, virtual worlds. *Educational Technology*, 35(5), 46-52.

Dede, C., & Lewis, M. (1995). Assessment of Emerging Educational Technologies That Might Assist and Enhance School-to-Work Transitions (NTIS Publication): Washington, DC: NTIS.

Dede, C., Salzman, M. C., & Loftin, R. B. (1996). ScienceSpace: Virtual Realities for Learning Complex and Abstract Scientific Concepts. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 246-252, 271). : IEEE Computer Society Press.

Dede, C. J., Salzman, M., & Loftin, R. B. (1996). The development of a virtual world for learning Newtonian mechanics. In Proceedings of the MHVR`94: Multimedia, Hypermedia, and Virtual Reality. Models, Systems, and Applications, (pp. 87-106). : Springer-Verlag.

Dede, C. (1996). Emerging Technologies and Distributed Learning. *American Journal of Distance Education*, 10(2), 4-36.

Dede, C. (1996). The Evolution of Distance Education: Emerging Technologies and Distributed Learning. *American Journal of Distance Education*, 10(2), 4-36.

Dede, C. (1996). Distance Learning--Distributed Learning: Making the Transformation. *Learning and Leading with Technology*, 23(7), 25-30.

Dede, C. (1996). Wired Classrooms. *Issues in Science and Technology*, 12(3), 8-9.

Deering, M. F. (1992). High Resolution Virtual Reality. In Proceedings of the SIGGRAPH 1992, (pp. 195-201). : ACM SIGGRAPH.

Deering, M. F. (1993). Data Complexity for Virtual Reality: Where do all the Triangles Go? In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 357-363). : IEEE Service Center.

Deering, M. F. (1993). Explorations of Display Interfaces for Virtual Reality. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 141-147). : IEEE Service Center.

Deering, M. F. (1993). Making Virtual Reality More Real: Experience with the Virtual Portal. In Proceedings of the Graphics Interface '93, (pp. 195-202). : Canadian Information Processing Society.

Deering, M. F., & Nelson, S. R. (1993). Leo: A System for Cost Effective 3D Shaded Graphics. In Proceedings of the SIGGRAPH 93, (pp. 101-108). : ACM.

Deering, M. F. (1994). Facing the Challenge: Delivering Virtual Reality. In Proceedings of the VRST '94 - Virtual Reality Software and Technology, (pp. 1-4). : World Scientific Publishing Company.

Deering, M. (1995). HoloSketch: A Virtual Reality Sketching/Animation Tool. *ACM Transactions on Computer-Human Interaction [Special Issue on Virtual Reality Software and Technology]*, 2(3), 220-238.

Deering, M. F. (1996). The HoloSketch VR Sketching System. *Communications of the ACM [special issue on Virtual Reality Software and Technology]*, 39(5), 54-61.

DeFanti, T. A., Santin, D. J., & Cruz-Neira, C. (1993 October). A 'Room' with a 'View'. *IEEE Spectrum [special report: Virtual Reality]*, 30(10), 30-33.

DeFanti, T., Brown, M., & Stevens, R. (1996). Virtual Reality Over High-Speed Networks. *IEEE Computer Graphics and Applications*, 16(4), 42-43.

DeHaemer, M. J., & Zyda, M. J. (1991). Simplification of Objects Rendered by Polygonal Approximations. *Computers & Graphics*, 15(2), 175-184.

del Pino, A. (1996). MPSC - A Model of Distributed Virtual Environments. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 21-30). : SpringerWien.

DeLanda, M. (1995). Virtual Environments and the Concept of Synergy. *Leonardo*, 28(5), 357-360.

Delaney, B. (1993, July). Where Virtual Rubber Meets the Road. *AI Expert*, 15-18.

Delaney, B. (1993, September). A Survey of Head Mounted Displays. *AI Expert*, 21-24.

Delaney, B. (1994). The Perfect VR Application. *Virtual Reality Special Report*(1), 15-18.

Delp, S., Loan, P., Hoy, H., Zajac, F., Topp, E., & Rosen, J. (1990). An Interactive Graphics-Based Model of the Lower Extremity to Study Orthopaedic Surgical Procedures. *IEEE Transaction on Biomedical Engineering*, 37(8), 757-767.

Delp, S. L. (1994). Building Biomechanical Models of the Musculoskeletal System for Surgical Simulations. *Virtual Reality Systems*, 1(3), 14-16.

- Delp, S. L., Loan, J. P., Basdogan, C., Buchanan, T. S., & Rosen, J. M. (1996). Surgical simulation: An emerging technology for military medical training. In Proceedings of the National Forum: Military Telemedicine On-Line - Today's Research, Practice, and Opportunities, (pp. 29-34). : IEEE Computer Society Press.
- Delp, S. L., Loan, P., Basdogan, C., & Rosen, J. M. (1997). Surgical Simulation: An Emerging Technology for Training in Emergency Medicine. *Presence: Teleoperators and Virtual Environments*, 6(1), 147-159.
- Demos, G. (1989). Computing Needs for High Resolution Synthetic Images. In Proceedings of the Projection Display Technology, Systems and Applications, (pp. 122-133). : SPIE.
- Denne, P. (1994). Virtual Motion. *Virtual Reality World*, 2(3), 41-44.
- Dennehy, M. T., Nesbitt, D. W., & Sumey, R. A. (1994). Real-Time Three-Dimensional Graphics Display for Antiair Warfare Command and Control. *John Hopkins APL Technical Digest*, 15(2), 110-119.
- Dery, M. (1993). Cyber Cafe. *New Media*, 3(9), 118-119.
- Derycke, A. C., Smith, C., & Hemery, L. (1995). Metaphors and interactions in virtual environments for open and distance education. In Proceedings of the ED-MEDIA 95: World Conference on Educational Multimedia and Hypermedia, (pp. 181-186). : Association for the Advancement of Computer Education.
- Desrosiers, S., & Bettis, D. (1993). SMART -- Situated Multimodal Advanced Real-Time Trainer. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 59). : NASA.
- Di Somma, C., Cicchetti, E., Casolino, D., Canavese, G., Toma, S., Raposio, E., & Badellino, F. (1996). Computer-Aided Locoregional Assessment of Soft Tissue Sarcoma and Three-Dimensional Simulator Surgery. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 618-622). Washington, DC: IOS Press.
- Dias, J. M. S., Galli, R., Almeida, A. C., Belo, C. A. C., & Rebordao, J. M. (1997). mWorld: A Multiuser 3D Virtual Environment. *IEEE Computer Graphics and Applications [special issue: 3D and Multimedia on the Information Superhighway]*, 17(2), 55-65.
- Dickens, A. R. (1993). Distributed Representation Issues for Distributed Virtual Environments. In Proceedings of the Twenty-Fifth Annual Summer Computer Simulation Conference, (pp. 894- 899). : SCS.
- Dickerson, J., & Kosko, B. (1993). Virtual Worlds as Fuzzy Cognitive Maps. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 471-477). : IEEE Service Center.
- Dickerson, J. A., & Kosko, B. (1994). Virtual Worlds as Fuzzy Cognitive Maps. *Presence: Teleoperators and Virtual Environments*, 3(2), 173-189.
- Dietzel, R., Bird, M., Kohler, A., & Olmstead, P. (1994). Adding Virtual Technology to the Curriculum - a Fictional Example. *EMI: Educational Media International*, 31(4), 238-241.
- Digiano, C. J., & Buxton, W. A. S. (1993). Using Non-Speech Audio at the Interface. *Virtual Reality Systems*, 1(1), 60-61.
- DiGioia, A. M., III, Jaramaz, B., O'Toole, R. V., III, Simon, D. A., & Kanade, T. (1995). Medical Robotics and Computer Assisted Surgery in Orthopaedics: An

Integrated Approach. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 88-90). Amsterdam: IOS Press.

Dilworth, D. C. (1993, July). Virtual Reality: Coming Soon to a Courtroom Near You? Trial, 13-15.

DiNova, K., DeFranco, R., Storch, P., & Reinberger, D. (1995). Conventional weapons effects and environments modeling in distributed interactive simulations. In Proceedings of the 1995 Summer Computer Simulation Conference, Twenty-Seventh Annual Summer Computer Simulation Conference, (pp. 465-470). : SCS.

Dinsmore, M. D., Langrana, N. A., & Burdea, G. C. (1994). Issues Related to Real-Time Simulation of a Virtual Knee Palpation. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 16-20). : SIG-Advanced Applications, Inc.

Dinsmore, M., Langrana, N., Burdea, G., & Ladeji, J. (1997). Virtual reality training simulation for palpation of subsurface tumors. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 54-60). : IEEE Computer Society Press.

DiSomma, C., Raposio, E., Fato, M., Schenone, A., Andreucci, L., Beltrame, F., & Santi, P. (1996). Simulation of Soft-Tissue Tumor Excisions: A Multimodal Interactive Approach. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 125-130). Washington, DC: IOS Press.

Disz, T., Papka, M., Stevens, R., Pellegrino, M., & Taylor, V. (1995). Virtual Reality Visualization of Parallel Molecular Dynamics Simulation. In Proceedings of the High Performance Computing Symposium 1995 'Grand Challenges in Computer Simulation', 1995 Simulation Multiconference, (pp. 483-487). : SCS.

Disz, T., Franguiadakis, T., Papka, M., Stevens, R., & Szymanski, M. (1995). Participatory Artificial Life Demonstration. In Proceedings of the Supercomputing '95, (pp. unpagedinated). : ACM.

Disz, T., Evard, R., Henderson, M. W., Nickless, W., Olson, R., Papka, M. E., & Stevens, R. (1995). Designing the Future of Collaborative Science: Argonne's Futures Laboratory. IEEE Parallel & Distributed Technology: Systems and Applications, 3(2), 14-21.

Ditlea, S. (1989, November). Inside Artificial Reality. PC Computing, 91-102.

Dittmar, M. L., & Hale, J. P. (1994). Virtual Reality as a Human Factors Design Analysis Tool for Architectural Spaces: Control Rooms to Space Stations II: Subjective Measures. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 280-284). : Human Factors and Ergonomics Society.

Dixon, A. R., Kirby, G. H., & Wills, D. P. M. (1994 June). A Data Structure for Artificial Terrain Generation. Computer Graphics Forum, 13(2), 37-48.

DiZio, P., & Lackner, J. R. (1992). Spatial Orientation, Adaption, and Motion Sickness in Real and Virtual Environments. Presence: Teleoperators and Virtual Environments, 1(3), 319-328.

Djajadiningsrat, J. P., Overbeeke, C. J., & Smets, G. J. F. (1996). Cubby - A Medical Virtual Environment Based on Multiscreen Movement Parallax. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 387-394). Washington, DC: IOS Press.

- Dobrow, R. (1994). Special Report: Virtual Reality Blasts Off. *Gadgetworld*, 1(1), 2.
- Docimo, S. G., Moore, R. G., & Kavoussi, L. R. (1997). Telerobotic Surgery Is Clinical Reality: Current Experience with Telementoring in Adults and Children. *Presence: Teleoperators and Virtual Environments*, 6(2), 173-178.
- Dohanish, G. (1994, January). Commercial 3D Model Libraries. *3D Artist*, 14, 24-29.
- Doi, M., Kato, N., Umeki, N., Harashima, T., & Matsuda, K. (1995). Visual engineering system-VIGOR: virtual environment for visual engineering and operation. In *Proceedings of the Symbiosis of Human and Artifact, the Sixth International Conference on Human-Computer Interactions*, (pp. 435-440). : Elsevier.
- Dolecek, Q. E. (1994). Computer-Generated Stereoscopic Displays. *John Hopkins APL Technical Digest*, 15(2), 137-142.
- Doll, T. J., & Hanna, T. E. (1995). Spatial and Spectral Release from Masking in Three-Dimensional Auditory Displays. *Human Factors [special issue: Telecommunications]*, 37(2), 341-355.
- Donovan, J. (1993). Marketing Virtual Reality. *Virtual Reality Systems*, 1(1), 21-24.
- Dorozynski, A. (1993). Computers Bring Back a Long-Lost French Abbey (Cluny Abbey). *Science*, 261(5121), 544-546.
- Doty, E., Zincone, L. H., & Balch, D. C. (1996). Telemedicine in the North Carolina Prison System: A Cost-Benefits Analysis. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 239-241). Washington, DC: IOS Press.
- Douville, B., Levison, L., & Badler, N. I. (1996). Task-Level Object Grasping for Simulated Agents. *Presence: Teleoperators and Virtual Environments*, 5(4), 416-430.
- Dove, T. (1994). Theater Without Actors--Immersion and Responses in Installation. *Leonardo*, 27(4).
- Dowding, T. J. (1992). A Self-Contained Interactive Motorskill Trainer. In *Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality*, (pp. 44-50). : Meckler.
- Dowding, T. J. (1994). Virtual Reality: Is It for Real? *Performance and Instruction*, 33(7), 20-23.
- Downes-Martin, S., Long, M., & Alexander, J. R. (1992). Virtual Reality as a Tool for Cross-Cultural Communication: An Example from Military Team Training. In *Proceedings of the Visual Data Interpretation*, (pp. 28-38). : SPIE.
- Doyle, M. D., Noe, A., Carlbom, I., Ang, C., & Martin, D. (1994). The Virtual Embryo: VR Applications in Human Developmental Anatomy. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 38-41). : Aligned Management Associates.
- Doyle, A. J. R. (1994). The Eye as a Velocity Transducer, an Independent Information Channel? In *Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements*, (pp. 339-350). : SPIE.
- Doyle, W. K. (1995). Interactive Image-Directed Epilepsy Surgery: Rudimentary Virtual Reality in Neurosurgery. In R. M. Satava, K. Morgan, H. B. Sieburg, R.

Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 91-100). Amsterdam: IOS Press.

Doyle, W. K. (1995). Rudimentary Virtual Reality in Neurosurgery (Interactive Image-Directed Epilepsy Surgery). *Journal of Medicine and Virtual Reality*, 1(1), 46-53.

Doyle, W. K. (1996). Low End Interactive Image-Directed Neurosurgery: Update on Rudimentary Augmented Reality Used in Epilepsy Surgery. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 1-11). Washington, DC: IOS Press.

Draper, J. V. (1995). Teleoperators for Advanced Manufacturing: Applications and Human Factors Challenges. *The International Journal of Human Factors in Manufacturing*, 5(1), 53-85.

Draper, M. H., Wells, M. J., Gawron, V. J., & Furness, T. A. (1996). Exploring the Influence of a Virtual Body on Spatial Awareness. In *Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting - 1996*, (pp. 1146-1150). : HFES.

Drascic, D., & Grodski, J. (1993). Using Stereoscopic Video for Defense Teleoperation. In *Proceedings of the Stereoscopic Displays and Applications IV*, (pp. 58-71). : SPIE.

Drascic, D., & Milgram, P. (1996). Perceptual Issues in Augmented Reality. In *Proceedings of the Stereoscopic Displays and Virtual Reality Systems III*, (pp. 123-134). : SPIE.

Driskill, E., & Cohen, E. (1995). Interactive Design, Analysis, and Illustration of Assemblies. In *Proceedings of the 1995 Symposium on Interactive 3D Graphics*, (pp. 27-34). : ACM.

Drucker, S., & Zeltzer, D. (1995). CamDroid: A System for Implementing Intelligent Camera Control. In *Proceedings of the 1995 Symposium on Interactive 3D Graphics*, (pp. 139-144). : ACM.

Druin, A., & Solomon, C. (1996). *Designing Multimedia Environments for Children: Computers, Creativity and Kids*. New York, NY: John Wiley & Sons.

Druin, A., Stewart, J., Proft, D., Bederson, B., & Hollan, J. (1997). KidPad: A Design Collaboration Between Children, Technologists, and Educators. In *Proceedings of the CHI '97: Human Factors in Computing Systems*, (pp. 463-470). : ACM, Inc.

du Pont, P. (1995). VR for Thermal Visualization: Analyzing Air and Temperature Flow. *VR World*, 3(3), 58-59.

Dudfield, H. J., & Naish, P. L. N. (1991). From Head-Up Displays To Helmet Mounted Displays: Human Factors. In *Proceedings of the Computer Graphics: Computer Animation, Virtual Reality, Visualization*, (pp. 171-180). : Blenheim On-line.

Duffy, T. M., Lowyck, J., & Jonassen, D. H. (1983). *Designing environments for constructive learning*. New York, NY: Springer.

Duke, D. J., & Harrison, M. D. (1993). Abstract Interaction Objects. In *Proceedings of the Eurographics '93*, (pp. C:25-C:36). : North-Holland.

Duke, A. (1996). Finding People in the Virtual World [poster]. In *Proceedings of the CVE'96: Collaborative Virtual Environments*, (pp. not paginated). : University of Nottingham.

Dumay, A. C. M. (1994). Cybersurgery. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 42-44). : Aligned Management Associates.

Dumay, A. C. M. (1995). Triage simulation in a virtual environment. In Proceedings of the Interactive Technology and the New Paradigm for Healthcare, Medicine meets Virtual Reality III, (pp. 101-111). : IOS Press.

Dumay, A. C., & Jense, G. J. (1995). Endoscopic surgery simulation in a virtual environment. Computers in Biology and Medicine, 25(2), 139-148.

Dumay, A. C. (1995). Medicine in virtual environments. Technology and Health Care, 3(2), 75-89.

Dumbreck, A. A., Abel, E., & Murphy, S. (1990). 3-D TV System for Remote Handling: Development and Evaluation. In Proceedings of the Stereo and Applications, (pp. 226-236). : SPIE.

Duncan, K. M., Seligmann, D., & Feiner, S. (1993). Supporting Interactivity in Automated 3D Illustrations. In Proceedings of the 1993 International Workshop on Intelligent User Interfaces, (pp. 37-44). : ACM Press.

Duncan, K. M., Harm, D. L., Crosier, W. G., & Worthington, J. W. (1993). Using Virtual Environment Technology for Preadapting Astronauts to the Novel Sensory Conditions of Microgravity. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology (ICAT/VET), (pp. 397-401). : NASA.

Duncan, D. (1994). Reflections on Jenny Holzer at the Guggenheim. Virtual Reality World, 2(2), 72-73.

Duncan, D. (1995). A New Economic Paradigm. VR World, 3(3), 72.

Dunkley, K. J. (1993). New 3D from 2D Visual Display Process. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 132-140). : SPIE.

Dunkley, P. (1994). Virtual reality in medical training [news]. Lancet, 343(8907), 1218.

Dunn, F. (1992). Sun's Virtual Lathe. VR Monitor, 1(4), 2-7.

Dunn-Roberts, R. (1994). "The Grandmother Museum": An Essay on the Human Hopes and Problems of VR. Virtual Reality World, 2(1), 46-47.

Dunnet, G., Grimsdale, R. L., Lister, P. F., McGroarty, I., McNeill, M. D. J., Nimmo, A. D., Shah, B., & White, M. (1991). Realism Meets Virtual Reality. In Proceedings of the IEE Colloquium on 'Real World Visualisation - Virtual World - Virtual Reality, (pp. 6/1-6/4). : IEE.

Dunnington, G. L., & DaRosa, D. A. (1994). Changing surgical education strategies in an environment of changing health care delivery systems. World Journal of Surgery, 18(5), 734-737.

Duranton, R. (1994). Submarine detection training using underwater robots. In Proceedings of the Oria 94: From Telepresence Towards Virtual Reality, (pp. 201-207). : Institute Internationale Robotique & Intelligence Artificielle.

Durlach, N. I. (1991). Auditory Localization in Teleoperator and Virtual Environment Systems. Perception, 20, 543-554.

Durlach, N. (1992). Super Auditory Localization for Improved Human-Machine Interfaces [Final report] (ADA2502888XSP): Springfield, VA: NTIS.

Durlach, N. I., Rigopoulos, A., Pang, X. D., Woods, W. S., Kulkarni, A., Colburn, H. S., & Wenzel, E. M. (1992). On the Externalization of Auditory Images. Presence: Teleoperators and Virtual Environments, 1(2), 251-257.

Durlach, N., Aviles, W. A., Pew, R. W., DiZio, P. A., & Zeltzer, D. L. (1992). Virtual Environment Technology for Training (VETT) (Report No. 7661): Cambridge, MA: BBN.

Durlach, N. I., Shinn-Cunningham, B. G., & Held, R. M. (1993). Supernormal Auditory Localization. I. General Background. *Presence: Teleoperators and Virtual Environments*, 2(2), 89-103.

Durlach, N. I., Shinn-Cunningham, B. G., & Held, R. M. (1993 spring). Supernormal Auditory Localization I: General Background. *Presence: Teleoperators and Virtual Environments*, 1(2), 89-103.

Durlach, N. I. (1994). Psychophysical Considerations in the Design of Human-Machine Interfaces for Teleoperator and Virtual-Environment Systems (Abstract). In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 45-47). : Aligned Management Associates.

Durlach, N. (1995). Virtual Reality (VR) and Human Perception, Performance, and Behavior are Related in a Number of Ways. In Proceedings of the Virtual Reality World '95, (pp. 277-278). : IDG Conferences and Seminars.

Durlach, N. I., & Mavor, A. S. (Eds.). (1995). *Virtual Reality: Scientific and Technological Challenges*. Washington, DC: National Academy Press.

Durlach, N. (1997). VR Technology and Basic Research on Humans [Keynote Address]. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 2-3). : IEEE Computer Society Press.

Durlach, N. (1997). The Potential of Teleoperation for Entertainment and Education. *Presence: Teleoperators and Virtual Environments*, 6(3), 350-351.

Dutton, G. (1992). VEOS: A Virtual Operating System to Handle Virtually Anything. *IEEE Software*, 9(3), 100-102.

Duvanenko, V. J., & Robbins, W. E. (1993). Algorithms for Stereoscopic Imaging. *Dr. Dobb's Journal*, 18(4), 18-29.

Dürst, M. (1993). Progressive Image Transmission for Multimedia Applications. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 57-68). New York, NY: John Wiley and Sons.

Dykstra, P. (1993). X11 in Virtual Environments. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 118-119). : IEEE Society Press.

Dysart, J. (1993). Only a NY Cab Ride is Scarier. *VR World*, 3(3), 32-33.

Dysart, J. (1994). VR Goes to Hollywood. *Virtual Reality World*, 2(6), 18-23.

Dysart, J. (1994). Wall Street Meets VR: Animated Investment Tracking. *Virtual Reality World*, 2(5), 22-25.

Dysart, J. (1995). Not Just Kid Stuff Anymore: Adult Entertainment Complexes Feature Sophisticated VR Experiences. *VR World*, 3(3), 22-23.

Dysart, J. (1995). VR Channel Surfing. *VRWorld*, 3(1), 44-45.

Dysart, J. (1995). Madison Avenue Discovers VR. *VR World*, 3(1), 28-29.

Dysart, J. (1995). VR.5: a License to Dream Again. *VR World*, 3(4), 17-18.

Dysart, J. (1995). Virtual Maintenance. *VR World*, 3(4), 22.

- Dysart, J. (1995). Detroit Creates a Beach Head for VR. *VR World*, 3(4), 20.
- Earnshaw, R. A., Vince, J. A., & Jones, H. (1995). *Virtual Reality Applications*. Orlando, FL: Academic Press.
- Earnshaw, R. (1997). 3D and Multimedia on the Information Superhighway. *IEEE Computer Graphics and Applications* [special issue: 3D and Multimedia on the Information Superhighway]17, 2(31-31).
- Eastgate, R., Nichols, S., & D'Cruz, M. (1996). Application of human performance theory to virtual environment development. In *Proceedings of the First International Conference on Engineering Psychology and Cognitive Ergonomics*, (pp. unpaginated). : Nottingham University Press.
- Eastgate, R., D'Cruz, M., & Wilson, J. R. (1997). A strategy for interactivity within virtual environment applications: A Virtual ATM Case Study. In *Proceedings of the Virtual Reality Universe '97*, (pp. unpaginated). : AMA, Inc.
- Ebenholtz, S. M. (1992). Motion Sickness and Oculomotor Systems in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 1(3), 302-305.
- Eberhardt, S. P., Bernstein, L. E., Coulter, D. C., & Hunckler, L. A. (1993). OMAR - A Haptic Display for Speech Perception by Deaf and Deaf-blind Individuals. In *Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93*, (pp. 195-201). : IEEE Service Center.
- Eberman, B., & An, B. (1993). EXOS Research on Force Reflecting Controllers. In *Proceedings of the Telemanipulator Technology*, (pp. 9-19). : SPIE.
- Ebert, D. S., Yagel, R., Scott, J., & Kurzion, Y. (1994). Volume Rendering Methods for Computational Fluid Dynamics Visualization. In *Proceedings of the Visualization '94*, (pp. 232-239). : IEEE Computer Society Press.
- Ebihara, K. (1995). Real-time Reproduction of Facial Expressions in 3D Face Model. In *Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing*, (pp. 103-109). : ATR International.
- Ebihara, K., Ohya, J., & Kishino, F. (1995). A Study of Real Time Facial Expression Detection for Virtual Space Teleconferencing. In *Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication*, (pp. 246-252). : IEEE.
- Edelsbrunner, H., Fu, P., & Qian, J. (1996 July). Geometric Modeling in CAVE. In *Proceedings of the ACM Symposium on Virtual Reality Software and Technology*, (pp. 35-41). : ACM.
- Edgar, G. K., Pope, J. C. D., & Craig, I. (1993). Visual Accommodation with Virtual Images [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.
- Edmond, C. V., & Sluis, D. (1996). ENT surgical simulator project. In *Proceedings of the National Forum: Military Telemedicine On-Line Today Research, Practice, and Opportunities*, (pp. 43-46). : IEEE Computer Society Press.
- Edmond, J., C.V., Heskamp, D., Sluis, D., Stredney, D., Sessannas, D., Wiet, G. J., Yagel, R., Weghorst, S., Oppenheimer, P., Miller, J., Levin, M., & Rosenberg, L. (1996). ENT Endoscopic Surgical Training Simulator. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 518-528). Washington, DC: IOS Press.

- Edwards, T. M. (1991). Virtual Worlds Technology as an Interface to Geographic Information. Unpublished Unpublished Master of Arts Thesis, Seattle, WA: Department of Geography, University of Washington.
- Edwards, O. J., Larimer, J., & Gille, J. (1992). Performance Considerations for High-Definition Head Mounted Displays. In Proceedings of the High-Resolution Displays and Projection Systems, (pp. 141-149). : SPIE.
- Edwards, E. K., Rolland, J. P., & Keller, K. P. (1993). Video See-through Design for Merging of Real and Virtual Environments. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 223-233). : IEEE Service Center.
- Edwards, C. M., Jr. (1995). The Internet High School: A Modest Proposal. NASSP Bulletin, 79(573), 67-71.
- Edwards, M., Santos, E., Jr., Banks, S. B., & Stytz, M. R. (1996). Computer generated intelligent companions for distributed virtual environments. In Proceedings of the Eighth IEEE International Conference on Tools with Artificial Intelligence, (pp. 450-452). : IEEE Computer Society Press.
- Edwards, W. K., & Mynatt, E. D. (1997). Timewarp: Techniques for Autonomous Collaboration. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 218-225). : ACM, Inc.
- Eggleson, R. G., Janson, W. P., & Adrich, K. A. (1996). Virtual Reality System Effects on Size-Distance Judgements in a Virtual Environment. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 139-146). : IEEE Computer Society Press.
- Egli, R., Petit, C., & Stewart, N. F. (1996). Moving coordinate frames for representation and visualization in four dimensions. Computers and Graphics, 20(6), 905-919.
- Eglowstein, H. (1990). Reach Out and Touch Your Data. Byte, 15(7), 283-289.
- Egsegian, R., Pittman, K., Farmer, K., & Zobel, R. (1993). Practical applications of virtual reality to firefighter training. In Proceedings of the 1993 Simulation Multiconference on the International Emergency Management and Engineering Conference, Tenth Anniversary: Research and Applications, (pp. 155-160). : SCS.
- Ehricke, H. H., Grunert, T., Buck, T., Fechter, J., Kloos, U., Strasser, W., & Kolb, R. (1995). Imaging and graphics in medicine: concept of an object-oriented platform for clinical research. Computer Methods and Programs in Biomedicine, 48(1-2), 157-162.
- Eichenlaub, J. B. (1990). An Autostereoscopic Display for Use with a Personal Computer. In Proceedings of the Stereoscopic Displays and Applications, (pp. 156-163). : SPIE.
- Eichenlaub, J. B. (1990). Dimension Technologies' Autostereoscopic Method. In Proceedings of the SIGGRAPH '90, (pp. 12.1-12.11). : ACM Press.
- Eichenlaub, J. B. (1992). Further Advances in Autostereoscopic Technology at Dimension Technologies Inc. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 163-175). : SPIE.
- Eichenlaub, J. B. (1993). Developments in Autostereoscopic Technology at Dimension Technologies Inc. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 177). : SPIE.

- Eichenlaub, J. B., & Touris, T. C. (1994). In-Cockpit "Situation Awareness: Autostereoscopic Avionics Display. In Proceedings of the Cockpit Displays, (pp. 395-406). : SPIE.
- Eichenlaub, J. B., & Katafiaz, M. E. (1996). Autostereoscopy in Industry. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 40-48). : SPIE.
- Eisenberg, H. (1992). Image-Based Endovascular Therapy. In Proceedings of the 1992 IMAGE Conference VI, (pp. 303-308). : IMAGE Society.
- Eisenberg, B., Hine, B., & Rasmussen, D. (1993, September). Telerobotic Vehicle Control: NASA Preps for Mars. *AI Expert*, 35-39.
- Eisler, R. D., Chatterjee, A. K., & Burghart, G. H. (1996). Simulation and Modeling of Penetrating Wounds from Small Arms. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 511-522). Washington, DC: IOS Press.
- Elias, B. (1995). Dynamic Auditory Preview for Visually Guided Target Aiming. In Proceedings of the Human Factors and Ergonomics Society, (pp. 1415-1419). : Human Factors and Ergonomics Society.
- Ellis, S. R., Tyler, M., Kim, W. S., McGreevy, M. W., & Stark, L. (1985). Visual enhancements for perspective displays: perspective parameters. In Proceedings of the 1985 IEEE International Conference on Cybernetics and Society, (pp. 815-818). : IEEE.
- Ellis, S. R. (1989). Visions of Visualization Aids: Design Philosophy and Observations. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 220-227). : SPIE.
- Ellis, S. R., Smith, S., & Hacisalihzade, S. (1989). Visual Direction as a Metric of Virtual Space. In Proceedings of the Human Factors Society, 33rd Annual Meeting, (pp. 1392-1395). : Human Factors Society.
- Ellis, S. R., Kaiser, M. K., & Grunwald, A. (Eds.). (1989). *Spatial Displays and Spatial Instruments* (NASA Conference Publication 10032). Moffett Field, CA: National Technical Information Service (NTIS).
- Ellis, S. R. (1991). Nature and Origins of Virtual Environments: A Bibliographical Essay. *Computing Systems in Engineering*, 2(4), 321-347.
- Ellis, S. R. (Ed.). (1991). *Pictorial Communication in Virtual and Real Environments*. London, UK: Taylor and Francis.
- Ellis, S. R., Tharp, G. K., Grunwald, A. J., & Smith, S. (1991). Exocentric Judgments in Real Environments and Stereoscopic Displays. In Proceedings of the Human Factors Society, 35th Annual Meeting, (pp. 1442-1446). : Human Factors Society.
- Ellis, S. R. (1992). The Design of Virtual Spaces and Virtual Environments. In Proceedings of the Human Vision, Visual Processing and Digital Display III, (pp. 536-540). : SPIE.
- Ellis, S. R. (1993). What are Virtual Environments? In Proceedings of the Third International Conference on Artificial Reality and Tele-Existence, ICAT '93, (pp. 81-90). : Japan Technology Transfer Association.
- Ellis, S. R., & Nemire, K. (1993). A Subjective Technique for Objective Calibration of Lines of Sight in Closed Virtual Environment Viewing Systems. In

Proceedings of the Society for Information Display, 1993 International Symposium, (pp. 487-490). : Society for Information Display.

Ellis, S. R., & Urs, J. B. (1994). Distance Perception of Stereoscopically Presented Virtual Objects Optically Superimposed on Physical Objects by a Head-Mounted See-Through Display. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 1300-1304). : Human Factors and Ergonomics Society.

Ellis, S. (1994 January). What Are Virtual Environments? IEEE Computer Graphics and Applications, 14(1), 17-22.

Ellis, S. (1995). Origins and Elements of Virtual Environments. In T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 14-62). New York, NY: Oxford University Press.

Ellis, S. R. (1995). Human Engineering in Virtual Environments. In Proceedings of the Virtual Reality World '95, (pp. 295-302). : IDG Conferences and Seminars.

Ellis, S. R., & Menges, B. M. (1995). Judged Distance to Virtual Objects in the Near Visual Field. In Proceedings of the Human Factors and Ergonomics Society, (pp. 1400-1404). : Human Factors and Ergonomics Society.

Ellis, G. (1996). They're Not Making 'Em Like They Used To: Virtual Reality Saves Time and Money in Manufacturing and Construction. Iris Universe, 36, 28-32.

Ellis, S. R., Breant, F., Menges, B., Jacoby, R., & Adelstein, B. D. (1996). Viewing difficulties with head-mounted aids for mechanical assembly using nearby virtual objects. In Proceedings of the EFTA '96: 1996 IEEE Conference on Emerging Technologies and Factory Automation, (pp. 418-422). : IEEE.

Ellis, S. R. (1996). Presence of Mind: A Reaction to Thomas Sheridan's "Further Musings on the Psychophysics of Presence". *Presence: Teleoperators and Virtual Environments*, 5(2), 247-259.

Ellis, S. R., Breant, F., Menges, B., Jacoby, R., & Adelstein, B. D. (1997). Factors Influencing Operator Interaction with Virtual Objects Viewed via Head-mounted See-through Displays: viewing conditions and rendering latency. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 138-145). : IEEE Computer Society Press.

Elsimary, H., Mashali, S., & Shaheen, S. (1993). A Method for Training Feed Forward Neutral Network to be Fault Tolerant. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 436-442). : IEEE Service Center.

Elsner, S. (1994, January). A Simple 3D Tracker. PCVR Magazine(13), 20-23.

Elvins, T. T. (1996). Volume Visualization in a Collaborative Computing Environment. *Computers & Graphics*, 20(2), 219-222.

Elvins, T. T., & Jain, R. (1996). Web-based Volumetric Data Retrieval. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium, (pp. 7-12). : ACM.

Emhardt, J., Semmler, J., & Strothotte, T. (1993). Hyper-Navigation in Virtual Buildings. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 342-348). : IEEE Service Center.

Emmett, A. (1992). Down to Earth: Commercial Applications of Virtual Reality. *Computer Graphics World*, 15(3), 43-48.

- Emmett, A. (1993). The Quest for "True" 3D. *Computer Graphics World*, 16(9), 35-42.
- Encarnação, J., Göbel, M., & Rosenblum, L. (1994 January). European Activities in Virtual Reality. *IEEE Computer Graphics and Applications*, 14(1), 66-74.
- Encarnação, J. L., & Felger, W. (1996). International Activities and Future Perspectives of Virtual Reality. In *Proceedings of the Computer Graphics International*, (pp. 9-24). : IEEE Computer Society Press.
- Encarnação, L. M., Fechter, J., Grunert, T., & Strasser, W. (1996). A platform for user-tailored interaction development in 2D, 3D, and VR. *Computer Graphics Forum*, 15(3), C433-C442.
- Eng-Kiat-Koh. (1996). WAVEVISIONS: a Desktop Virtual Reality Software. *Computers and Graphics*, 20(1), 69-75.
- Engel, T., Applegate, R., II, & Applegate, P. (1995). An Interactive Electronics Book for Learning Transesophageal Echocardiography. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 112-113). Amsterdam: IOS Press.
- England, R. (1993). Investigation of Visual and Tactile Feedback in Simple Visuomotor Tasks [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 434-440.
- England, D., Prinz, W., Simarian, K., & Ståhl, O. (1996). Virtual Administration: Providing a DIVE VR Interface to POLITeam. In *Proceedings of the CVE'96: Collaborative Virtual Environments*, (pp. not paginated). : University of Nottingham.
- Engstrand, B. (1996 July). Pneumatics: a Force Beyond Virtual Reality. *Hydraulics and Pneumatics*, 49(7), 35-38.
- Enislidis, G., Ploder, O., Wagner, A., Truppe, M., & Ewers, R. (1995). Advantages and Drawbacks of Intraoperative Navigation Systems in Oral and Maxillofacial Surgery. In H. Lemke (Ed.), *Computer Assisted Radiology*, (pp. 844-846). Berlin, Germany: Springer.
- Enislidis, G. O., Ploder, G., Wagner, A., Truppe, M., & Ewers, R. (1995). Augmented Reality in Oral and Maxillofacial Surgery. *Journal of Medicine and Virtual Reality*, 1(1), 22-24.
- Eprainian, B. (1995). Dressing for VR. *PC Magazine*, 14(5), 183(7).
- Epstein, W., Babler, T., & Bownds, S. (1992). Attention Demands of Processing Shape in Three-Dimensional Space: Evidence from Visual Search and Precuing Paradigms. *Journal of Experimental Psychology: Human Perception and Performance*, 18(2), 503-511.
- Erbacher, R. F., & Southard, D. A. (1995). Interactive visualization of C^{sup} 2 simulations. In *Proceedings of the 1995 Summer Computer Simulation Conference, the Twenty-Seventh Annual Summer Computer Simulation Conference*, (pp. 223-228). : SCS.
- Erickson, T. (1993). Artificial Realities as Data Visualization Environments. In A. Wexelblatt (Ed.), *Virtual Reality: Applications and Explorations*, (pp. 1-22). Boston, MA: Academic.
- Erikson, C., & Hundley, W. (1996). Advancements in related technologies bring virtual reality to GIS. In *Proceedings of the High-Fidelity Simulation for Training, Test Support, Mission Rehearsal, and Civilian Applications*, (pp. 14-18). : SPIE.

- Esposito, C., Paley, W. B., & Ong, J. (1995). Of Mice and Monkeys: A Specialized Input Device for Virtual Body Animation. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 109-114). : ACM.
- Esposito, C. (1996). User Interface Issues for Virtual Reality Systems. Tutorial 7. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 340-341). : ACM.
- Esposito, C. (1997). Introduction to Virtual Reality and User Interface Issues for Virtual Systems. In Proceedings of the IEEE VRAIS '97: Virtual Collaborative Environments, (pp. 1-108). : IEEE.
- Estes, L. E., & Fain, G. (1995). An optical range for naval gunfire training. In Proceedings of the Acquisition, Tracking, and Pointing IX, (pp. 153-159). : SPIE.
- Estvanik, S. (1994). Artificial Intelligence in Wargames. *AI Expert*, 9(5), 22-31.
- Ewing, T. L. (1994). Technical Support Package on Fully Three-Dimensional Virtual-Reality System (NPO-18733): Pasadena, CA: Jet Propulsion Laboratory, California Institute of Technology.
- Export, V., & Blau, H. (1992). Performance Issue(s): Happening, Body, Spectacle, Virtual Reality. Discourse: Theoretical Studies in Media and Culture [special issue], 14(2).
- Ezaki, T., & Short, D. R. (1996). Scientific visualization ability development-factor analysis of student difficulties in figure transformation problems using computer graphics function. In Proceedings of the WSCG 96: Fourth International Conference in Central Europe on Computer Graphics and Visualization 96, (pp. 79-83). : University of West Bohemia.
- Ezell, J. D., & Hodges, L. F. (1990). Some Preliminary Results On Using Spatial Locality to Speed Up Ray Tracing of Stereoscopic Images. In Proceedings of the Stereoscopic Displays and Applications, (pp. 298-306). : SPIE.
- Fa, M., Fernando, T., & Dew, P. M. (1993). Direct 3D Manipulation Techniques for Interactive Constraint-Based Solid Modeling. In Proceedings of the Eurographics '93, (pp. C:237-C:248). : North-Holland.
- Fabiani, L., Burdea, G., Langrana, N., & Gomez, D. (1996). Human Performance Using the Rutgers Master II Force Feedback Interface. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 54-60). : IEEE Computer Society Press.
- Fahlen, L. E. (1993). Virtual Reality and the MultiG Project. In Proceedings of the VR'93 Virtual Reality International 93, the Third Annual Conference on Virtual Reality, (pp. 78-86). : Meckler.
- Fahlen, L. E., Stahl, O., Brown, C. G., & Carlsson, C. (1993). A Space Based Model for User Interaction in Shared Synthetic Environments. In Proceedings of the INTERCHI '93, (pp. 31-37). : Addison-Wesley.
- Faigle, C., Fox, G. C., Furmanski, W., Niemiec, J., & Simoni, D. A. (1993). Integrating Virtual Environments with High Performance Computing. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 62-68). : IEEE Service Center.
- Fairchild, K. M., Lee, B. H., Loo, J., Ng, H., & Serra, L. (1993). The Heaven and Earth Virtual Reality: Designing Applications for Novice Users. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 47-54). : IEEE Service Center.

- Fairchild, K. M., Poston, T., & Bricken, W. (1994). Efficient Virtual Collision Detection for Multiple Users in Large Virtual Spaces. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 271-285). : ACM.
- Fajans, J. (1992). Xyzscope: A New Option in 3-D Display Technology. In Proceedings of the Visual Data Interpretation, (pp. 25-27). : SPIE.
- Falby, J. S., Zyda, M. J., Pratt, D. R., & Wilson, K. P. (1992). Educational and Technological Foundations for the Construction of a 3D Virtual World. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 190-208). : Meckler Publishing.
- Falby, J. S., Zyda, M. J., Pratt, D. R., & Mackey, R. L. (1993). NPSNET: Hierarchical Data Structures for Real-time Three-Dimensional Visual Simulation. Computers and Graphics, 17(1), 65-69.
- Fang, T.-P., & Piegl, L. A. (1995 September). Delaunay Triangulation in Three Dimensions. IEEE Computer Graphics and Applications, 15(5), 62-69.
- Faraday, P., & Sutcliffe, A. (1997). Designing Effective Multimedia Presentations. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 272-278). : ACM, Inc.
- Farquhar, J. D., & Regian, J. W. (1993). The Effects of a Dynamic Graphical Model during Simulation-based Training of Console Operation Skills. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 111-116). : NASA.
- Faulkner, G. (1994). A First Approach to Virtual Reality for Interactive Volume Rendering and Hyperthermia Treatment Planning. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 48-51). : Aligned Management Associates.
- Faulkner, G. (1996). Assisting Maxillofacial Surgery by Using Multimedia VR Techniques. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 495-501). Washington, DC: IOS Press.
- Faust, N. L. (1996). Security Applications of Virtual Reality GIS. In Proceedings of the 24th AIPR Workshop on Tools and Techniques for Modeling and Simulation, (pp. 39-48). : SPIE.
- Fechter, J., Grunert, T., Encarna o, L. M., & Strasser, W. (1996). User-centered development of medical visualization applications: flexible interaction through communicating application objects. Computers & Graphics, 20(6), 763-774.
- Feiner, S., & Besher, C. (1990). Worlds Within Worlds: Metaphors for Exploring N-Dimensional Virtual Worlds. In Proceedings of the Third Annual Symposium on User Interface Software and Technology, UIST, (pp. 76-83). : ACM.
- Feiner, S. (1991). Automated Generation of Three-Dimensional Virtual Worlds for Task Explanation (ADA2478592XSP): Springfield, VA: NTIS.
- Feiner, S. (1992). Virtual Worlds for Visualizing Information. In Proceedings of the Supercomputing '92, (pp. 638-639). : IEEE Computer Society Press.
- Feiner, S., MacIntyre, B., & Seligmann, D. (1992). Annotating the Real World with Knowledge-Based Graphics on a See-Through Head-Mounted Display. In Proceedings of the Graphics Interface '92, Canadian Human-Computer Communication Society, (pp. 78-85). : Canadian Info. Proc. Soc.

- Feiner, S., MacIntyre, B., Haupt, M., & Solomon, E. (1993). Windows on the World: 2D Windows for 3D Augmented Reality. In Proceedings of the UIST '93 - The Sixth Annual Symposium on User Interface Software and Technology, (pp. 145-156). : ACM Press.
- Feiner, S., Zhou, M., Crutcher, L., & Lazar, A. (1993). A Virtual World for Network Management. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 55-61). : IEEE Service Center.
- Feiner, S. (1993). Virtual Worlds Research at Columbia University. *Virtual Reality Systems*, 1(1), 63-66.
- Feiner, S., MacIntyre, G., & Seligmann, D. (1993). Knowledge-Based Augmented Reality. *Communications of the ACM*, 36(7), 52-63.
- Feiner, S. (1994). Augmented Reality. In Proceedings of the ACM SIGGRAPH 1994, (pp. 7:1-7:11). : ACM.
- Feiner, S. (1994). Redefining the User Interface: Augmented Reality. In Proceedings of the ACM SIGGRAPH 1994, (pp. 18:1-18:7). : ACM.
- Feiner, S., MacIntyre, B., & Seligmann, D. (1994). Knowledge-Based Augmented Reality. In Proceedings of the ACM SIGGRAPH 1994, (pp. 17:1-17:10). : ACM.
- Feiner, S., MacIntyre, B., Haupt, M., & Solomon, E. (1994). Windows on the World: 2D Windows for 3D Augmented Reality. In Proceedings of the ACM SIGGRAPH 1994, (pp. 16:1-16:11). : ACM.
- Feiner, S. K., Webster, A. C., Krueger, T. E., III, MacIntyre, B., & Keller, E. J. (1995 summer). Architectural Anatomy. *Presence: Teleoperators and Virtual Environments*, 4(3), 318-325.
- Feiner, S. K. (1996). Adding Insight through Animation in Augmented Reality. In Proceedings of the Computer Animation '96, (pp. 14-15). : IEEE Computer Society Press.
- Feiner, S. K. (1996). Research in 3D User Interface Design at Columbia University. In Proceedings of the CHI '96: ACM Conference on Human Factors in Computing Systems, (pp. 129-130). : ACM.
- Feldman, S., & Starr, M. (1994). The Lightscape Visualization System. *Virtual Reality Systems*, 1(3), 80-82.
- Felger, W. (1992). How Interactive Visualization Can Benefit from Multidimensional Input Devices. In Proceedings of the Visual Data Interpretation, (pp. 15-24). : SPIE.
- Felger, W. (1995). Employment Potential and Application of Virtual Reality in the Domain of Business Management. In Proceedings of the Virtual Reality World '95, (pp. 420-430). : IDG Conferences and Seminars.
- Fellous, A. (1993). STV - Synthetic TV: From Laboratory Prototype to Production Tool. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 127-134). New York, NY: John Wiley and Sons.
- Fels, S. S., & Hinton, G. E. (1993 January). Glove-Talk: A Neural Network Interface Between a Data-glove and a Speech Synthesizer. *IEEE Transactions on Neural Networks*, 4, 2-8.
- Fenn, J. (1993, September). In the Eye of the Beholder. *AI Expert*, 51-53.

- Ferder, M., Glicksman, A., & Strauch, B. (1994). 3-D Imaging in Microneurovascular Surgery. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 167-168). : SIG-Advanced Applications, Inc.
- Fernando, T., Dew, P., Fa, M., Maxfield, J., & Hunter, N. (1995). A Shared Virtual Workspace for Constraint-based Solid Modelling. In M. Göbel (Ed.), Virtual Environments '95: Selected Papers of the Eurographics Workshops, (pp. 185-198). New York, NY: SpringerWien.
- Ferrin, F. J. (1991). Survey Of Helmet Tracking Technologies. In Proceedings of the Large-Screen Projection, Avionic, and Helmet-Mounted Displays, (pp. 86-94). : SPIE.
- Ferrington, G., & Loge, K. (1992). Virtual reality: A new learning environment. *The Computing Teacher*, 19(7), 16-19.
- Figueiredo, M., Bohm, K., & Teixeira, J. (1993 November/December). Advanced Interaction Techniques in Virtual Environments. *Computers and Graphics*, 17(6), 655-661.
- Filby, A. M. I. (1996). Proposal for Implementing Multi-User Database (MUD) Technology in an Academic Library. *Internet Reference Services Quarterly*, 1(2), 75-95.
- Finch, M., Falvo, M., Chi, V., Taylor, R. M., II, Washburn, S., & Superfine, R. (1995). Surface Modification Tools in a Virtual Environment Interface to a Scanning Probe Microscope. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 13-18). : ACM.
- Fink, P. K., & Herren, L. T. (1993). A Knowledge Engineering Taxonomy for Intelligent Tutoring System Development. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 27-38). : NASA.
- Fiorini, P., Giancaspro, A., Losito, S., & Pasquariello, G. (1993). Neural Networks for the Segmentation of Teleoperation Tasks. *Presence: Teleoperators and Virtual Environments*, 2(1), 54-65.
- Fischer, H., Neisius, B., & Trapp, R. (1995). Tactile Feedback for Endoscopic Surgery. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 114-117). Amsterdam: IOS Press.
- Fischer, H., & Trapp, R. (1996). Tactile Optical Sensor for Use in Minimal Invasive Surgery. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 623-629). Washington, DC: IOS Press.
- Fischetti, M. (1993). The Sound of Data: Virtual Acoustics. *Technology Review*, 96(5), 17-19.
- Fisher, S. S. (1986). Telepresence Master Glove Controller for Dextrous Robotic End-Effectors. In Proceedings of the Intelligent Robots and Computer Vision, (pp. 396-401). : SPIE.
- Fisher, S. S. (1986). Virtual Interface Environment. In Proceedings of the IEEE/AIAA 7th Digital Avionics Systems, (pp. 346-350). : IEEE.
- Fisher, S. S., McGreevy, M., Humphries, J., & Robinett, W. (1986). Virtual Environment Display System. In Proceedings of the 1986 Workshop on Interactive 3-D Graphics, (pp. 77-87). : ACM.

Fisher, S. S., McGreevy, M., Humphries, J., & Robinett, W. (1986). Virtual Workstation: A Multimodal, Stereoscopic Display Environment. In Proceedings of the Intelligent Robots and Computer Vision, (pp. 517-522). : SPIE.

Fisher, S. S., McGreevy, M., Humphries, J., & Robinett, W. (1987). Virtual Interface Environment for Telepresence Applications. In Proceedings of the International Topical Meeting on Remote Systems and Robotics in Hostile Environments, (pp. x-y). : American Nuclear Society.

Fisher, R. N., & Bandini, P. L. (1989). Stereoscopic CAD and Environmental Sculpture: Enhancement of the Design Process in the Visual Arts. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 4-17). : SPIE.

Fisher, S. S. (1990). Virtual Interface Environments. In B. Laurel (Ed.), *The Art of Human-Computer Interface Design*, (pp. 423-438). Reading, MA: Addison-Wesley Publishing Company, Inc.

Fisher, S. S., & Tazelaar, J. M. (1990, July). Living in a Virtual World. *Byte*, 215-221.

Fisher, S. S., Amkraut, S., Girard, M., & Trayle, M. (1994). Menagerie: Designing a Virtual Experience. In Proceedings of the Engineering Reality of Virtual Reality, (pp. 397-400). : SPIE.

Fisher, S. S. (1995). Recent Developments in Virtual Experience Design and Production. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems II, (pp. 296-302). : SPIE.

Fisher, S., & Fraser, G. (1996). The Virtual Bowery Adventure. *Computer Graphics* [Focus: "Real" Virtual Reality], 30(4), 44-46.

Fishwick, P. (1995). *Simulation Model Design & Execution: Building Digital Worlds*. Indianapolis, IN: Prentice Hall.

Fitch, W. T., & Kramer, G. (1994). Sonifying the Body Electric: Superiority of an Auditory over a Visual Display in a Complex, Multivariate System. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 307-326). : Addison-Wesley Publishing Company.

Fitzmaurice, G. W. (1993 July). Situated Information Spaces and Spatially Aware Palmtop Computers. *Communications of the ACM*, 36(7), 38-49.

Fitzmaurice, G. W., & Buxton, W. (1997). An Empirical Evaluation of Graspable User Interfaces: towards specialized, space-multiplexed input. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 43-58). : ACM, Inc.

Fjuk, A., & Sorenson, E. K. (1996). Drama as a Metaphor for Design of Situated, Collaborative Distributed Learning. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

Flaig, T., Grefen, K., & Neuber, D. (1996). Interactive Graphical Planning and Design of Spacious Logistic Environments. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 10-17). : Queen Mary & Westfield College.

Fleischer, S. D., Rock, S. M., & Lee, M. J. (1995). Underwater Vehicle Control from a Virtual Environment Interface. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 25-26). : ACM.

- Fleischmann, M. (1993). A Virtual Walk Through Berlin Visiting a Virtual Museum. *Virtual Reality World*, 1(1), n-p.
- Fletcher, B., & Harris, S. (1996). Development of a virtual environment based training system for ROV pilots. In Proceedings of the OCEANS 96 MTS/IEEE: 'Prospects for the 21st Century', (pp. 65-71). : IEEE.
- Fontaine, G. (1992). The Experience of a Sense of Presence in Intercultural and International Encounters. *Presence: Teleoperators and Virtual Environments*, 1(4), 482-490.
- Forcade, T. (1993). Evaluating 3D on the High End (part one of a two-part series). *Computer Graphics World*, 16(10), 44-56.
- Ford, M. J. (1994 May). Inspiring the Future: Merging Mass Communication, Art, Entertainment and Virtual Environments. *Computer Graphics*, 28(2), 135-138.
- Forsberg, A., Herndon, K., & Zeleznik, R. (1996). Aperture Based Selection for Immersive Virtual Environments. In Proceedings of the UIST '96: the Ninth Annual ACM Symposium on User Interface Software and Technology, (pp. 95-96). : ACM SIGGRAPH.
- Forslund, D. W., Phillips, R. L., Kilman, D. G., & Cook, J. L. (1996). TeleMed: A distributed virtual patient record system (Product ID: DE96009030INF): Los Alamos National Lab, NM; Dept. of Energy, Washington, DC.
- Forsman, P., & Halme, A. (1994). A Two-Stage Method for Selective Modeling of Unknown Teleoperation Environment. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 333-338). : IEEE.
- Foss, J. D., Atkin, B. C. M., & Ackroyd, E. (1993). Information Trading in Distributed Virtual Environments. In Proceedings of the IEE Colloquium on 'Distributed Virtual Reality', (pp. 4/1-4/4). : IEE.
- Foster, S., & Wenzel, E. (1992). Three dimensional auditory displays. In Proceedings of the Informatique '92, International Conference Interface to Real and Virtual Worlds, (pp. 41). : EC2.
- Foster, D. H., & Linnell, K. J. (1993). Colour Constancy Under Terrestrial and Alien Daylights [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.
- Foster, S. (1993). 3-D Sound Technology. In Proceedings of the IVR '93: Industrial Virtual Reality Show and Conference, (pp. 122-127). : Reed Exhibitions Japan, Ltd.
- Fouad, H., & Hahn, J. K. (1996). Framework for Integrating Sound into Virtual Environment Interfaces. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 285-291). : SPIE.
- Foulson, D. (1995). IRIS Explorer: A Framework for Investigation. *Computer Graphics*, 29(2), 13-16.
- Fox, G. C., Furmanski, W., Nilan, M. S., & Small, R. V. (1994). Assessing Virtual Reality for Education : Syracuse, NY: NPAC, Syracuse University.
- Foxlin, E., & Durlach, N. (1994). An Inertial Head-Orientation Tracker with Automatic Drift Compensation for Use with HMD's. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 159-174). : World Scientific Publishing Co, Inc.

- Foxlin, E. (1996). Inertial Head-Tracker Sensor Fusion by a Complimentary Separate-Bias Kalman Filter. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 185-195). : IEEE Computer Society Press.
- Foyle, D. C., McCann, R. S., Sanford, B. D., & Schwirzke, M. F. J. (1993). Attentional Effects with Superimposed Symbology: Implications for Head-Up Displays (HUD). In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting Designing for Diversity, Vol. 2, (pp. 1340-1344). : Human Factors Society.
- Frame, P. (1993, November 1). 'Agile' Factories May Turn Dealers into Order-Takers. *Automotive News*(5524), 3-5.
- Franchi, J. (1995). Virtual Reality: An Overview [ERIC Digest] (EDO-IR-95-5): Washington, DC: Office of Educational Research and Improvement (ED).
- Francis, C., Boyes, E., Qualter, A., & Stanisstreet, M. (1993). Ideas of elementary students about reducing the "Greenhouse Effect". *Science Education*, 77, 375-392.
- Franken, R., Gupta, S. C., Rod, S. R., Thomas, S. V., Barker, J. H., Kon, M., & Banis, J. C. (1995). Microsurgery Without a Microscope: Development of a Three-Dimensional On-Screen Microsurgery System (TOMS). *Journal of Medicine and Virtual Reality*, 1(1), 26-32.
- Frerichs, D. J. (1994). Portable Virtual Environment Generator: InterFACE. In Proceedings of the The Engineering Reality of Virtual Reality, (pp. 297-303). : SPIE.
- Fricke, K. (1994). Introduction : Virtual Reality - Venus Return or Vanishing Point. *Leonardo*, 27(4).
- Friedman, D. (1993). Virtual Reality in the Real World. *Virtual Reality Systems*, 1(1), 11-12.
- Friedmann, M., Starner, T., & Pentland, A. (1992). Synchronization in Virtual Realities. *Presence: Teleoperators and Virtual Environments*, 1(1), 139-144.
- Fritz, M. (1991, February). The World of Virtual Reality. *Training*, 28(2), 45-50.
- Fritz, J. P. (1997). A Haptic Object-Oriented Texture Rendering System [poster paper]. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 210). : IEEE Computer Society Press.
- Froehlich, B., Krueger, W., Grunst, G., & Wesche, G. (1995). The Responsive Workbench: A Virtual Working Environment for Physicians. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 118-125). Amsterdam: IOS Press.
- Froehlich, B., Kirsch, B., Krueger, W., & Wesche, G. (1995). Further Development of the Responsive Workbench. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 237-246). New York, NY: SpringerWien.
- Fruhauf, T., & Dai, F. (1996). Scientific Visualization and Virtual Prototyping in the Product Development Process. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 223-233). : SpringerWien.
- Fu, S., Bao, H., & Peng, Q. (1996). An Accelerated Rendering Algorithm for Stereoscopic Display. *Computers & Graphics*, 20(2), 223-230.
- Fuchs, H., Pizer, S. M., Creasy, J. B., Renner, J. B., & Rosenman, J. G. (1988). Interactive, Richly Cued Shaded Display of Multiple 3-D Objects in Medical Images. In Proceedings of the Medical Imaging II, (pp. 842-849). : SPIE.

Fuchs, H., Levoy, M., & Pizer, S. M. (1989 August). Interactive Visualization of 3D Medical Data. *IEEE Computer*, 22(8), 46-51.

Fuchs, H., & Bishop, G. (1992). Research Directions of Virtual Environments (TR92-027): Chapel Hill, NC: University of North Carolina, Dept. of Computer Science.

Fuchs, H. (1994). Virtual Reality: Past, Present, and Future. In Proceedings of the ACM SIGGRAPH 1994, (pp. 2:1-2:11). : ACM.

Fuchs, H. (1996). Toward Virtual Teleconferencing for Telemedical Applications. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 283-285). Washington, DC: IOS Press.

Fuchs, H., State, A., Pisano, E. D., Garrett, W. F., Hirota, G., Livingston, M., Whitton, M. C., & Pizer, S. M. (1996). Towards performing ultrasound-guided needle biopsies from within a head-mounted display. In Proceedings of the VBC '96: Visualization in Biomedical Computing, 4th International Conference, (pp. 591-600). : Springer-Verlag.

Fujii, T., Yasuda, T., Yokoi, S., & Toriwaki, J. (1993). A Virtual Pendulum Manipulation System on a Graphic Workstation. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 296-301). : IEEE.

Fujimoto, H., & Chen, L. Y. (1994). Composite Effectiveness and Applications of Metaphor in the Virtual Environment. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 56-61). : IEEE.

Fujishiro, I., Maruyama, T., & Tanaka, R. (1997). Human Behavior-Oriented Adaptive Texture Mapping: A Time Critical Approach for Image-Based Virtual Showrooms. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 4-11). : IEEE Computer Society Press.

Fukai, K., Amafuji, H., & Murata, M. (1994). Color and High-Resolution Head-Mounted Display. In Proceedings of the Engineering Reality of Virtual Reality, (pp. 317-324). : SPIE.

Fukai, K., & Amafuji, H. (1996). Development of See-Through Vision (a high resolution, see-through head-mounted display). *Shimadzu Review*, 53(1), 69-74.

Fukumoto, M., & Tonomura, Y. (1997). "Body Coupled FingeRing": Wireless Wearable Keyboard. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 147-154). : ACM, Inc.

Funda, J., Lindsay, T. S., & Paul, R. P. (1992). Teleprogramming: Toward Delay-Invariant Remote Manipulation. *Presence: Teleoperators and Virtual Environments*, 1(1), 29-44.

Funda, J., Lindsay, T. S., & Paul, R. P. (1992). Teleprogramming: Toward Delay-Invariant Remote Manipulation. *Presence: Teleoperators and Virtual Environments*, 1(1), 29-44.

Funda, J., Taylor, R., Eldridge, B., Gruben, K., LaRose, D., & Gomory, S. (1994). Image-Guided Command and Control of a Surgical Robot. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 52-57). : Aligned Management Associates.

Funkhouser, T. A., & Seqin, C. H. (1993). Adaptive Display Algorithm for Interactive Frame Rates During Visualization of Complex Virtual Environments. In Proceedings of the SIGGRAPH 93, (pp. 247-254). : ACM.

Funkhouser, T. A. (1995). RING: A Client-Server System for Multi-User Virtual Environments. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 85-92). : ACM.

Funkhouser, T., Teller, S., Sequin, C., & Khorramabadi, D. (1995). The UC Berkeley System for Interactive Visualization of Large Architectural Models. *Presence: Teleoperators and Virtual Environments*, 5(1), 13-44.

Funkhouser, T. A. (1996). Network Topologies for Scalable Multi-User Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 222-229). : IEEE Computer Society Press.

Furmanski, W. (1992). SuperComputing and Virtual Reality. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 59-74). : Meckler Publishing.

Furness, T. A. (1985, June 30). Virtual Panoramic Display for the LHX. *Army Aviation*, 63-66.

Furness, T. A. (1986). The Super Cockpit and Its Human Factors Challenges. In Proceedings of the Human Factors Society, 30th Annual Meeting, (pp. 48-52). : Human Factors Society.

Furness, T. A., & Kocian, D. F. (1986). Putting Humans into Virtual Space. In Proceedings of the Aerospace Conference, Aerospace Simulation II, (pp. 214-230). : Society for Computer Simulation.

Furness, T. A. (1986, December). Fantastic Voyage. *Popular Mechanics*, 63-65.

Furness, T. A. (1987). Designing in Virtual Space. In W. B. Rouse & K. R. Boff (Eds.), *System Design*, (pp. 127-144). Amsterdam: North-Holland.

Furness, T. A. (1988). Harnessing Virtual Space. In Proceedings of the 1988 SID International Symposium, (pp. 4-7). : Society for Information Display.

Furness, T. A. (1988, August 15). Super Cockpit Amplifies Pilot's Senses and Actions. *Government Computer News*, 76-77.

Furness, T. A. (1989). Configuring Virtual Space for the Super Cockpit. *Medecine Aeronautique et Spatiale*, XXVII(10).

Furness, T. A. (1990). Creating Better Virtual Worlds. In Proceedings of the Human-Machine Interfaces for Teleoperators and Virtual Environments, (pp. 48-51). : NTIS.

Furness, T. A. (1993). Cobwebs in a Virtual Attic. *CSERIAC Gateway*, 4(3), 9-10.

Furtado, P., & Teixeira, J. C. (1993). Storage Support for Multidimensional Data in Multimedia Databases. In Proceedings of the Eurographics '93, (pp. C:89-C:100). : North-Holland.

Gallen, C. C. (1994). Neuromagnetic Functional Brain Mapping. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 59-62). : Aligned Management Associates.

Galloway, S. L., Pflaging, M., & Rice, G. (1997). Use of virtual reality and digital camera techniques for law enforcement and explosive ordnance. In Proceedings of the National and International Law Enforcement Databases, (pp. 100-107). : SPIE.

Galyean, T. A., & Hughes, J. F. (1991). Sculpting: An Interactive Volumetric Modeling Technique. *Computer Graphics*, 25(4), 267-274.

- Galyean, T. A. (1995). Guided Navigation of Virtual Environments. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 103-104). : ACM.
- Gambelin, A. M. (1993). Virtual Reality [special issue]. IRIS Universe(25).
- Garant, E., Daigle, A., Desbiens, P., Okapuu von Veh, A., Rizzi, J. C., Shaikh, A., Gauthier, R., Malowany, A. S., & Marceau, R. J. (1995). A virtual reality training system for power-utility personnel. In Proceedings of the IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing, (pp. 296-299). : IEEE.
- Garant, E., Desbiens, P., Daigle, A., Okapuu von Veh, A., Rizzi, J. C., Shaikh, A., Gauthier, R., Malowany, A. S., & Marceau, R. J. (1995). Three-dimensional modelling for a virtual reality operator training simulator. In Proceedings of the Stockholm Power Tech. International Symposium on Electric Power Engineering, (pp. 31-36). : IEEE.
- Garcia, A. B., Gocke, R. P., Jr. , & Johnson, N. P., Jr. (1994). Virtual Prototyping: Concept to Production : Fort Belvoir, VA: Defense Systems Management College Press.
- Garcia, B. J. (1994). Medical VR and the Deepvision 3D Vision System. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge` , (pp. 55-57). : SIG-Advanced Applications, Inc.
- Garcia, B. J., & Greenstein, R. J. (1994). True-Stereoscopic Video from Monoscopic Sources: The DeepVision System for Minimally Invasive Surgery. True-Stereoscopic Video from Monoscopic Sources: The DeepVision System for Minimally Invasive Surgery, 1(3), 52-57.
- Gardiner, W. L. (1995 Winter). Virtual Reality/Cyberspace: Challenges to Communication Studies. The International Journal of Virtual Reality, 1(1), 22-27.
- Gaudillat, F., Rodin, V., & Tisseau, J. (1996). Real-Time Tracking Movements Using a Video Camera and a Position Sensor. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 70-72). : Queen Mary & Westfield College.
- Gausemeier, J., Ebbesmeyer, P., & Grafe, M. (1995). Realistic Modeling of the Manufacturing Area of a Virtual Enterprise. In Proceedings of the Virtual Reality World '95, (pp. 193-204). : IDG Conferences and Seminars.
- Gausemeier, J., von Bohuszewicz, O., Gehnen, G., & Grafe, M. (1996). CYBERBIKES: An Immersive Virtual Environment Controlled by Real CIM-Applications. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 102-111). : Queen Mary & Westfield College.
- Gaver, W. W. (1994). Using and Creating Auditory Icons. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 417-446). : Addison-Wesley Publishing Company.
- Gay, E. (1994). Virtual Cell Biology. In Proceedings of the SIGGRAPH '94, (pp. 166-167). : ACM SIGGRAPH.
- Gay, E. (1994). Virtual reality at the Natrona County School System: Building virtual worlds on a shoe-string budget. Virtual Reality World, 2(6), 44-47.
- Gay, E. (1994, Winter). Is Virtual Reality a Good Teaching Tool? Virtual Reality Special Report, 1(4), 51-60.

Geake, E. (1992, April 11). Computer Games Make Learning Virtually Irresistible. *New Scientist*, 134(1816), 19.

Geiger, B., & Kikinis, R. (1995). Simulation of endoscopy. In Proceedings of the CVRMed '95: Computer Vision, Virtual Reality and Robotics in Medicine, (pp. 277-281). : Springer-Verlag.

Geis, W. P., Kim, H. C., Brennan, E. J., McAfee, P. C., & Wang, Y. (1996). Robotic Arm Enhancement to Accommodate Improved Efficiency and Decreased Resource Utilization in Complex Minimally Invasive Surgical Procedures. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 471-481). Washington, DC: IOS Press.

Geiselman, E. E., & Osgood, R. K. (1993). Toward an Empirically Based Helmet-Mounted Display Symbology Set. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting, Designing for Diversity, (pp. 93-97). : Human Factors Society.

Geissen, S. A. (1995). A Simulating Success. *IRIS Universe*(30), 8-10.

Geitz, S., Hanson, T., & Maher, S. (1996). Computer Generated 3-Dimensional Models of Manual Alphabet Handshapes for the World Wide Web. In Proceedings of the Assets '96: the Second Annual ACM Conference on Assistive Technologies, (pp. 27-31). : ACM SIGGRAPH.

Gelband, P. (1993). World toolkit Architecture. In Proceedings of the IVR '93: Industrial Virtual Reality Show and Conference, (pp. 72-76). : Reed Exhibitions Japan, Ltd.

Gembecki, M., & Rousseau, D. (1993, July). Naval Applications of Virtual Reality. *AI Expert: Virtual Reality '93 Special Report*, 67-72.

Germain, D., McNenny, B., & Palumbo, D. (1993). Beyond Knowledge Acquisition -- A Blueprint for Knowledge Construction. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 416). : NASA.

Geshwind, D. M. (1992). Adapting Traditional Media for Virtual Reality Environments. In Proceedings of the Virtual Reality '93. Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 51-61). : Meckler.

Gessner, C. E., Jowell, P. S., & Baillie, J. (1995). Novel methods for endoscopic training. *Gastrointestinal Endoscopy Clinics of North America*, 5(2), 323-336.

Ghazisaedy, M., Adamczyk, D., Sandin, D. J., Kenyon, R. V., & DeFanti, T. A. (1995). Ultrasonic Calibration of a Magnetic Tracker in a Virtual Reality Space. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 179-188). : IEEE Computer Society Press.

Ghee, S., & Naughton-Green, J. (1994). Programming Virtual Worlds. In Proceedings of the ACM SIGGRAPH 1994, (pp. 6:1-6:58). : ACM.

Gibbs, G., & Henry, M. (1996). A visual MUD system on the WWW: Computer supported co-operative learning for part-time students on theoretical social science or humanities modules [poster]. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

Gibbs, S., & Baudish, P. (1996). Interaction in the Virtual Studio. *Computer Graphics* [Focus: "Real" Virtual Reality], 30(4), 29-32.

- Gibson, C. P., & Furness, T. A. (1986). Effective Control Strategies for the Virtual Cockpit. In Proceedings of the 1986 SID International Symposium, (pp. 448-451, 492). : Society for Information Display.
- Gibson, I., Brown, D., Cobb, S., & Eastgate, R. (1993). Virtual reality and rapid prototyping. London, UK: IEE.
- Gierlich, H. W. (1992). The Application of Binaural Technology. *Applied Acoustics*, 36(3-4), 219-244.
- Gilboa, P. (1994). Accuracy evaluation of HMD electromagnetic tracker. In Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements, (pp. 126-132). : SPIE.
- Gildea, J. P., & Bailey, J. H. (1994). Correlates of Route Traversal Performance in a Virtual Environment. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 966). : Human Factors and Ergonomics Society.
- Gilden, D. (1992). Human Interface Devices. In Proceedings of the Virtual Worlds: Real Challenges, (pp. 15-18). : Meckler Publishing.
- Giles, W., Schroeder, R., & Cleal, B. (1994). Virtual Reality and the Future of Interactive Games. In Proceedings of the Virtual Reality '94: Anwendungen und Trends, (pp. 377-391). : Springer-Verlag.
- Gililan, R. E., & Wood, F. (1995 May). Visualization, Virtual Reality, and Animation within the Data Flow Model of Computing. *Computer Graphics* [Special Issue: Modular Visualization Environments (MVEs)], 55-58.
- Gilkey, R. H. (1992). Use of Virtual Environment Training Technology for Individual Combat Simulation (ADA2530368XSP): Springfield, VA: NTIS.
- Gilkey, R. H., & Weisenberger, J. M. (1995). The Sense of Presence for the Suddenly Deafened Adult: Implications for Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 4(4), 357-363.
- Gilkey, R. H., & Anderson, T. R. (1996). Binaural and Spatial Hearing. New Jersey: Erlbaum Associates.
- Gillan, D. J., & LaSalle, S. M. (1994). A Compositional Model of Human Interaction with Graphs: III. Spatial Orientation. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 285-289). : Human Factors and Ergonomics Society.
- Ginis, R., & Nadeau, D. (1996). Creating VRML Extensions to Support Vector Field Visualization. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium, (pp. 13-20). : ACM.
- Gisi, M. A., & Sacchi, C. (1994). Co-CAD: A Collaborative Mechanical CAD System. *Presence: Teleoperators and Virtual Environments*, 3(4), 341-350.
- Giuffrida, F., Morasso, P., & Vercelli, G. (1994). Cooperation and Collaboration between Actors and Virtual Models on Stage. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 68-71). : IEEE.
- Glantz, K., Durlach, N. I., Barnett, R. C., & Aviles, W. A. (1996). Virtual Reality (VR) and Psychotherapy: Opportunities and Challenges. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 720). Washington, DC: IOS Press.

Glantz, K., Durlach, N. I., Barnett, R. C., & Aviles, W. A. (1996). Virtual reality (VR) for psychotherapy: From the physical to the social environment. *Psychotherapy*, 33(3), 464-473.

Glantz, K., Durlach, N. I., Barnett, R. C., & Aviles, W. A. (1997). Virtual Reality (VR) and Psychotherapy: Opportunities and Challenges. *Presence: Teleoperators and Virtual Environments*, 6(1), 87-105.

Gleason, P. L., Kikinis, R., Wells, W., Ettinger, G., Jolesz, F. A., Grimson, W. E. L., Lozano-Perez, T., White, S., & Lorensen, W. (1994). Computer Image-Guided Surgery. In *Proceedings of the Virtual Reality and Medicine: The Cutting Edge*, (pp. 73-75). : SIG-Advanced Applications, Inc.

Glen, S. (1992). Real Fun, Virtually. In *Proceedings of the 1992 IMAGE Conference VI*, (pp. 141-146). : IMAGE Society.

Glidden, R. (1994, January). Immersion Probe. *3D Artist*(14), 8.

Glor, P. J., & Boyle, E. S. (1993). Design Evaluation for Personnel, Training and Human factors (DEPTH). In *Proceedings of the Annual Reliability and Maintainability Symposium*, (pp. 18- 25). : IEEE.

Glovsky, P. (1995). State of Funding for VR: Little Activity in the Public Market for New Age Media. *VR World*, 3(3), 70.

Gobbetti, E., Balaguer, J., & Thalmann, D. (1993). VB2: An Architecture for Interaction in Synthetic Worlds. In *Proceedings of the UIST '93 - The Sixth Annual Symposium on User Interface Software and Technology*, (pp. 167-178). : ACM Press.

Goble, J. C., Hinckley, K., Pausch, R., Snell, J. W., & Kassell, N. F. (1995). Two-Handed Spatial Interface Tools for Neurosurgical Planning. *IEEE Computer*, 28(7), 20-26.

Godec, C. J. (1995). Clinical Application of Pavlov Conditioning Reflexes in Treatment of Urinary Incontinence. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 126-131). Amsterdam: IOS Press.

Goertz, L., Muller, A., & Seegers, K. (1995). First Experiences with Virtual Reality - Results of a Group Discussion with New Users. In *Proceedings of the Virtual Reality World '95*, (pp. 303-306). : IDG Conferences and Seminars.

Goldman, J., & Roy, T. M. (1994). The Cosmic Worm. *IEEE Computer Graphics and Applications*, 14(4), 12-14.

Goldsby, M., Pahdya, A., Aldridge, A., & Maida, J. (1993). A Virtual Reality Browser for Space Station Models. In *Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology*, (pp. 2-9). : NASA.

Goldsby, M. E., Pandya, A. K., & Maida, J. C. (1994). Scripting Human Animations in a Virtual Environment. In *Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality*, . : NASA.

Gomez, D., Burdea, G., & Langrana, N. (1995). Integration of the Rutgers Master II in a Virtual Reality Simulation. In *Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95*, (pp. 198-202). : IEEE Computer Society Press.

Good, M., & Tan, L. (1994). VR in Architecture: Today's Use and Tomorrow's Promise. *Virtual Reality World*, 2(6), 58-64.

- Gore, R. A. (1993). Reality or Virtual Reality? The Use of Interactive, Three-Dimensional Computer Simulations at Trial. *Rutgers Computer and Technology Law Journal*, 19, 459-493.
- Gorski, A. M. (1992). User Evaluation of a Stereoscopic Display for Space Training Applications. In *Proceedings of the Stereoscopic Displays and Applications III*, (pp. 236-243). : SPIE.
- Gortler, S. J., & Cohen, M. F. (1995). Hierarchical and Variational Geometric Modeling with Wavelets. In *Proceedings of the 1995 Symposium on Interactive 3D Graphics*, (pp. 35-42). : ACM.
- Goslin, M., & Morie, J. F. (1996). Virtopia: Emotional Experiences in Virtual Environments. *Leonardo*, 29(2), 95-100.
- Gossweiler, R., Long, C., Koga, S., & Pausch, R. (1993). DRIVER: A Distributed Virtual Environment Research Platform. In *Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality*, (pp. 10-15). : IEEE Society Press.
- Gossweiler, R., Laferriere, R. J., Keller, M. L., & Pausch, R. (1994). An Introductory Tutorial for Developing Multiuser Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 3(4), 255-264.
- Goto, A., Inoue, R., Tezuka, T., & Yoshikawa, H. (1995). A Research on Tele-operation using Virtual Reality. In *Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication*, (pp. 147-153). : IEEE.
- Gottschalk, S., & Hughes, J. F. (1993). Autocalibration for Virtual Environments Tracking Hardware. In *Proceedings of the SIGGRAPH 93*, (pp. 65-72). : ACM.
- Gourret, J. P., & Khamlichi, J. (1996). A model for compression and classification of face data structures. *Computers and Graphics*, 20(6), 863-879.
- Govers, F. (1995). Visualizing Abstract Concepts in VR. *VR World*, 3(4), 38-39.
- Göbel, M., & Neugebauer, J. (1993 November/December). The Virtual Reality Demonstration Centre. *Computers and Graphics*, 17(6), 627-631.
- Göbel, M. (Ed.). (1995). *Virtual Environments '95: Selected Papers of the Eurographics Workshops*. New York, NY: SpringerWien.
- Göbel, M. (1996). Projects in VR: Industrial Applications. *IEEE Computer Graphics and Applications*, 16(1), 10-13.
- Gradecki, J. D. (1993 August). An Introduction to PC-based Virtual Reality. *The Computer Applications Journal*, 37, 12-19.
- Gradecki, J. (1994). Designing Heavy Virtual Objects. *PCVR Magazine*(14), 7-10.
- Gradecki, J. (1994). VGA-TO-NTSC Conversion. *PCVR Magazine*(14), 35-36.
- Gradecki, J. D. (1994). Build Your Own Arm-Based Head Tracker. *PCVR Magazine*(13), 6-12.
- Gradecki, J. D. (1994, January). Interfacing the Stuntmaster. *PCVR Magazine*(13), 25-32.
- Gradecki, J. D. (1994, January). REND386 Version 5.0: Introduction. *PCVR Magazine*(13), 34-36.
- Gradecki, J. D. (1994, January). Survey of Available Head Trackers. *PCVR Magazine*(13), 24.

- Graham, E. D. (1996). Virtual Pointing on a Computer Display: Non-Linear Control-Display Mappings. In Proceedings of the Graphics Interface '96, (pp. 39-46). : Canadian Information Process Society.
- Graham, C. (1996). Database Visualization and VRML. In Proceedings of , (pp. 21-24). : ACM.
- Grange, S., Bunker, T., & Cooper, J. (1996). Networking virtual reality for shoulder arthroscopy. BJHC&IM: British Journal of Healthcare Computing & Information Management, 13(10), 26-28.
- Granieri, J. P., Becket, W., Reich, B. D., Crabtree, J., & Badler, N. I. (1995). Behavior Control for Real-Time Simulated Human Agents. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 173-180). : ACM.
- Granieri, J. P., Crabtree, J., & Badler, N. I. (1995). Production and Playback of Human Figure Motion for 3D Virtual Environments. In Proceedings of the the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 127-135). : IEEE Computer Society Press.
- Grant, F. L., McCarthy, L. S., Pontecorvo, M. S., & Stiles, R. J. (1991). Training in virtual environments. In Proceedings of the ICAT 91: the 1991 Conference on Intelligent Computer-Aided Training, (pp. 320-333). : NASA.
- Grantham, C. E. (1992). Visual Thinking in Organizational Analysis. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 70-76). : Meckler.
- Gratch, J., & DeJong, G. (1996). A statistical approach to adaptive problem solving. Artificial Intelligence, 88(1-2), 101-142.
- Grebner, K., & May, F. (1995). Applications of Virtual Reality Techniques in the Industry. Selected Examples. In Proceedings of the Virtual Reality World '95, (pp. 451-468). : IDG Conferences and Seminars.
- Green, M. (1990). The Virtual Reality Papers, Volume I (TR90-07): Edmonton, Alberta, Canada: Dept. of Computing Science, University of Alberta.
- Green, P. E., Piantanida, T. A., Hill, J. W., Simon, I. B., & Satava, R. M. (1991). Telepresence: Dextrous Procedures in a Virtual Operating Field (Abstract). American Surgeon, 57, 192.
- Green, M. (1992). Temporal Sampling Requirements for Stereoscopic Displays. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 101-111). : SPIE.
- Green, M., Bryson, S., Poston, T., & Wexelblat, A. (1994). Hands Off My VR: The Role of Gestures in VR. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 267-270). : World Scientific Publishing Co, Inc.
- Green, M., Halliday, S., Liang, J., & Shaw, C. (1994). University of Alberta 3D Modelling Tools. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 313-314). : World Scientific Publishing Co, Inc.
- Green, M., & Sun, H. (1995). Computer Graphics Modeling for Virtual Environments. In T. A. Furness & W. Barfield (Eds.), Virtual Environments and Advanced Interface Design, (pp. 63-101). New York, NY: Oxford University Press.
- Green, P. S., Hill, J. W., Jensen, J. F., & Shah, A. (1995). Telepresence surgery. IEEE Engineering in Medicine and Biology, 14(3), 324-329.

- Green, M. (1996). Shared Virtual Environments: the Implications for Tool Builders. *Computers and Graphics*, 20(2), 185-190.
- Green, M. (1996). Animation in the Virtual World. In Proceedings of the Computer Animation '96, (pp. 5-12). : IEEE Computer Society Press.
- Green, M. (1996). A Framework for Real-Time Rendering in Virtual Reality. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 3-9). : ACM.
- Green, M. (1996). Shared Virtual Environments: the Implications for Tool Builders. *Computers and Graphics*, 20(2), 185-190.
- Green, M., & Halliday, S. (1996). A Geometric Modeling and Animation System for Virtual Reality. *Communications of the ACM [special issue on Virtual Reality Software and Technology]*, 39(5), 54-61.
- Greene, N., Kass, M., & Miller, G. (1993). Hierarchical Z-buffer visibility. In Proceedings of the Computer Graphics, (pp. 231-238). : ACM.
- Greene, N. (1997). Computer Software for Risk Assessment. *Journal of Chemical Information and Computer Sciences*, 37(1), 148-150.
- Greenfield, R. P. (1992). Laser Beam Display Holds Hope for VR. (Human Interface Laboratory Researches Improved Virtual Reality Imaging). *Computer Graphics World*, 15(8), 22.
- Greenfield, R. (1994). Navy VR Flight Simulator. *Virtual Reality Special Report*, 1(3), 61-64.
- Greenhalgh, C., & Benford, S. (1995). MASSIVE: A Collaborative Virtual Environment for Teleconferencing. *ACM Transactions on Computer-Human Interaction [Special Issue on Virtual Reality Software and Technology]*, 2(3), 239-261.
- Greenhalgh, C., & Benford, S. (1995). MASSIVE: A Distributed Virtual Reality System Incorporating Spatial Trading. In Proceedings of the 15th International Conference on Distributed Computing Systems, (pp. 27-34). : IEEE Computer Society Press.
- Greenhalgh, C. M., & Benford, S. D. (1995). MASSIVE: A Virtual Reality System for Tele-conferencing. *ACM Transactions on Computer Human Interfaces*, 2(3), 239-261.
- Greenhalgh, C., & Benford, S. (1995). Virtual Reality Tele-conferencing: Implementation and Experience. In Proceedings of the ECSCW '95: the Fourth European Conference on Computer-Supported Cooperative Work, (pp. 165-180). : North-Holland Press.
- Greenhalgh, C. (1996). Making People Persistent in Collaborative Virtual Environments [poster]. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Greenleaf, W. J. (1992). The DataGlove and DataSuit Technology for the Medical Market. In Proceedings of the Virtual Worlds: Real Challenges, (pp. 19-22). : Meckler Publishing.
- Greenleaf, W. J. (1994). DataGlove and DataSuit: Virtual Reality Technology Applied to the Measurement of Human Movement. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 63-69). : Aligned Management Associates.

- Greenleaf, W. J., & Tovar, M. A. (1994). Augmenting reality in rehabilitation medicine. *Artificial Intelligence in Medicine*, 6(4), 289-299.
- Greenleaf, W. (1995). Rehabilitation, Ergonomics, and Disability Solutions Using VR Technology. In Proceedings of the Virtual Reality World '95, (pp. 141-144). : IDG Conferences and Seminars.
- Greenleaf, W. J. (1995). Rehabilitation, Ergonomics, and Disability Solutions Using Virtual Reality Technology. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 415-422). Amsterdam: IOS Press.
- Greenleaf, W. J., Tovar, M. A., & Weghorst, S. (1995). Augmenting Reality in Rehabilitation Medicine. *Virtual Reality Special Report*, 2(1), 9-14.
- Greuel, C., Bolas, M. T., Bolas, N., & McDowall, I. E. (1996). Sculpting 3D Worlds with Music: Advanced Texturing Techniques. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 306-319). : SPIE.
- Grigsby, S. S., & Tsou, B. H. (1994). Visual Processing and Partial-Overlap Head-Mounted Displays. *Journal of the SID*, 2(2), 69-74.
- Grimes, J. (1992 March). Virtual Reality Goes Commercial with a Blast. *IEEE Computer Graphics and Applications*, 12(2), 16-18.
- Grimes, G. J., McClellan, S. A., Goldman, J., Vaughn, G. L., Conner, D. A., Kujawski, E., McDonald, J., Winokur, T., & Fleming, W. (1996). Applications of Virtual Reality Technology in Pathology. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 319-327). Washington, DC: IOS Press.
- Grimsdale, C. (1991). dVS-Distributed Virtual Environment System. In Proceedings of the Computer Graphics, Computer Animation, Virtual Reality, Visualisation, (pp. 163-170). : Blenheim Online.
- Grimsdale, C. (1992). DVS: Distributed Virtual Environment System. London, England: Division, Ltd.
- Grimsdale, C. (1992). Virtual Reality-Key Technologies, Problems and Emerging Solutions. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 14-22). : Meckler Publishing.
- Grimsdale, C., & Atkin, P. (1992). SuperVision: A Parallel Architecture for Virtual Reality. London, England: Division, Ltd.
- Grimsdale, C. (1993). Virtual Reality Evolution or Revolution. In Proceedings of the IVR '93: Industrial Virtual Reality Show and Conference, (pp. 60-64). : Springer-Verlag.
- Grimsdale, C. (1995). VR Applications, Technologies and Business Benefits. In Proceedings of the Virtual Reality World '95, (pp. 431-434). : IDG Conferences and Seminars.
- Grimshaw, A. S., Wulf, W. A., French, J. C., Reynolds, P. F., & Weaver, A. C. (1995). Legion: The Next Logical Step Toward a World-Wide Virtual Computer. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.
- Grinstein, G. G., Mitchell, R. B., & Southard, D. A. (1993). Virtual Reality: Interface Architecture For Interactive Simulations. In Proceedings of the Twenty-Fifth Annual Summer Computer Simulation Conference, (pp. 259-264). : Society of Computer Simulation.

- Grinstein, G. G., Southard, D. A., & Lee, J. P. (1993). Virtual Environment Architecture for Rapid Application Development. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 75-82). : NASA.
- Grinstein, G. G., & Southard, D. A. (1995). Rapid Modeling and Design in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 5(1), 146-158.
- Grisedale, S., Graves, M., & Grunnsteidl, A. (1997). Designing a Graphical User Interface for Healthcare Workers in Rural India. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 471-478). : ACM, Inc.
- Grissom, F., Goza, S. P., & Goza, S. M. (1994). Applying Virtual Reality to Commercial "Edutainment". In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 125-127). : NASA Conference Publications.
- Gromala, D., & Sharir, Y. (1994). Dancing with the Virtual Dervish: Virtual Bodies. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 321-328). : World Scientific Publishing Co, Inc.
- Gross, B., & Brain, J. (1993). Limbo Champion in the Low Cost VR Competition: The Power Glove Serial Interface. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 169-175). : IEEE Service Center.
- Grosskopf, S., Hildebrand, A., Malkowitz, R., Muller, W., Ziegler, R., & Graschew, G. (1996). Computer aided surgery-vision and feasibility of an advanced operation theatre. *Computers and Graphics*, 20(6), 825-838.
- Grosso, R., Schulz, M., Kraheberger, J., & Ertl, T. (1996). Flow Visualization for Multiblock Multigrid Simulations. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 296-308). : SpringerWien.
- Grönemeyer, D. H. W., & Seibel, R. M. M. (1996). MRI- and CT-scopic Microsurgery and Drug Installation for Outpatient Treatments. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 77-79). Washington, DC: IOS Press.
- Grönemeyer, D. H. W., Seibel, R. M. M., Schmidt, A., Melzer, A., & Deli, M. (1996). Two- and Three-Dimensional Imaging for Interventional MRI and CT Guidance. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 62-76). Washington, DC: IOS Press.
- Gröpl, T. G., Hesser, J., Kröll, J., Männer, R., Poliwoda, C., Reinhart, C., Hassfeld, S., Jäger, W., Quien, N., Simon, J., & Wirth, J. (1996). Interactive Operation Planning and Control with VIRIM. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 121-133). Washington, DC: IOS Press.
- Gruenbaum, P. E., McNeely, W. A., Sowizral, H. A., Overman, T. L., & Knutson, B. W. (1997). Implementation of dynamic robotic graphics for a virtual control panel. *Presence: Teleoperators and Virtual Environments*, 6(1), 118-126.
- Grunwald, A. J., & Kohn, S. (1994 January). Visual Field Information in Low Altitude Visual Flight by Line-of-Sight Slaved Helmet-Mounted Displays. *IEEE Transactions on Systems, Man, and Cybernetics*, 24(1), 120-134.
- Guckenberger, D., & Stanney, K. (1995). Enhancing the fidelity of virtual environments through the manipulation of virtual time. In Proceedings of the Symbiosis of Human and Artifact, the Sixth International Conference on Human-Computer Interactions, (pp. 505-510). : Elsevier.

Guey, F.-C. (1994). Learning rationales and virtual reality technology in education. *Journal of Educational Technology Systems*, 23(4), 327-336.

Gunderson, R. W., & Smith, S. J. (1996). Applications of virtual reality technology to wheelchair remote steering systems. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.

Gunkel, R., Freysinger, W., Thumfart, W. F., & Truppe, M. (1995). Application of the ARTMA Image-Guided Navigation System to Endonasal Sinus. In H. Lemke (Ed.), *Computer Assisted Radiology*, (pp. 1147-1151). Berlin, Germany: Springer.

Gunther, T., Poliwoda, C., Reinhart, C., Hesser, J., Manner, R., Meinzer, H.-P., & Baur, H.-J. (1995). Virim: A Massively Parallel Processor for Real-Time Volume Visualization in Medicine. *Computers & Graphics*, 19(5), 705-710.

Gupta, S., Datta, M. S., Rana, V., & Grover, S. (1996). Electronic Mimosa. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 228-233). : SPIE.

Gupta, S. C., Klein, S. A., Mehl, D. C., Verdi, M. G., & Anderson, G. L. (1996). Introduction of New Technologies to the Medical Undergraduate Curriculum. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 211-219). Washington, DC: IOS Press.

Gupta, S. C., Mehl, D. C., Verdi, M. G., Barker, J. H., & Klein, S. A. (1996). Simplified Access to Medical Resources on the Internet: How To Get Clinicians on the Web. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 630-641). Washington, DC: IOS Press.

Gupta, V., & Reddy, N. P. (1996). Surface Electromyogram for the Control of Anthropomorphic Teleoperator Fingers. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 482-487). Washington, DC: IOS Press.

Gupta, S. C., Klein, S. A., Mehl, D. C., & Finger, P. E. (1996). Using the World Wide Web for Peer-to-Peer Patient Support. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 307-318). Washington, DC: IOS Press.

Gupta, V., Reddy, N. P., & Batur, P. (1997). Forces in Laparoscopic Surgical Tools. *Presence: Teleoperators and Virtual Environments*, 6(2), 218-228.

Gupta, R., Sheridan, T., & Whitney, D. (1997). Experiments Using Multimodal Virtual Environments in Design for Assembly Analysis. *Presence: Teleoperators and Virtual Environments*, 6(3), 318-338.

Gustafson, J. L., & Snell, Q. O. (1995). HINT: A New Way to Measure Computer Performance. In Proceedings of the Twenty-Eighth Hawaii International Conference on System Sciences, (pp. 392-401). : IEEE Computer Society Press.

Guzdial, M. (1995). Software-realized Scaffolding to Facilitate Programming for Science Learning. *Interactive Learning Environments*, 4(1), 1-44.

Haase, H., Strassner, J., & Dai, F. (1995). Virtual Molecules, Rendering Speed, and Image Quality. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 70-86). New York, NY: SpringerWien.

Haase, H., Strassner, J., & Dai, F. (1996). VR Techniques for the Investigation of Molecular Data. *Computers & Graphics*, 20(2), 207-218.

- Haase, H. (1996). Symbiosis of Virtual Reality and Scientific Visualization System. *Computer Graphics Forum*, 15(3), C443-C451, C486.
- Haase, H., & dohrmann, C. (1996). Doing it Right: Psychological Tests to Ensure the Quality of Scientific Visualization. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 243-256). : SpringerWien.
- Hadipriono, F., Tsay, J., Barsoum, A., Nemeth, Z., & Larew, R. (1995). Visualization and graphics in INTREPID-VR. In Proceedings of the Visualization and Intelligent Design in Engineering and Architecture II, (pp. 107-113). : Computer Mechanical Publications.
- Hadipriono, F. C. (1996). Virtual Reality Applications in Civil Engineering. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 93-100). : ACM.
- Haegele, T. (1995). Animation, Interactive Film and Virtual Reality. In Proceedings of the Virtual Reality World '95, (pp. 233-238). : IDG Conferences and Seminars.
- Hafner, U., & Robler, A. (1995). Interactive Optimization with Evolutionary Strategies as a Tool for Virtual Reality. In Proceedings of the Virtual Reality World '95, (pp. 369-378). : IDG Conferences and Seminars.
- Hahn, J. K., Gritz, L., Darken, R., Geigel, J., & Lee, J. W. (1993). An Integrated Virtual Environment System. *Presence: Teleoperators and Virtual Environments*, 2(4), 353-360.
- Hahn, J. K., Gritz, L., Darken, R., Geigel, J., & Lee, J. W. (1994). An Integrated Virtual Environment System. *Presence: Teleoperators and Virtual Environments*, 2(4), 353-360.
- Haier, R. J. (1996). Psychology, Functional Brain Imaging, and Virtual Environments. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 721). Washington, DC: IOS Press.
- Hajek, D., & Nouza, J. (1996). Unhiding Hidden Markov Models by their Visualization (Application in Speech Processing). In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 277-285). : SpringerWien.
- Hale, J. P. (1992). Assessment of a Head-Mounted Miniature Monitor. In Proceedings of the Human Factors Society 36th Annual Meeting, (pp. 346-350). : Human Factors Society.
- Hale, J. P. (1994). Applied virtual reality in aerospace design. In Proceedings of the Wescon/94 Idea/Microelectronics Conference Record, (pp. 378-383). : IEEE.
- Hale, J. P., & Dittmar, M. L. (1994). Virtual Reality as a Human Factors Design Analysis Tool for Architectural Spaces -- Control Rooms to Space Stations I: Objective Measures. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 275-279). : Human Factors and Ergonomics Society.
- Hale, J. P. (1995). Applied virtual reality research and applications at NASA/Marshall Space Flight Center. In Proceedings of the Symbiosis of Human and Artifact: the Sixth International Conference on Human-Computer Interactions (HCI International'95), (pp. 523-528). : Elsevier.
- Hale, J. P., II. (1996). Applied virtual reality in aerospace. In Proceedings of the Wescon/96 Conference Proceedings, (pp. 547-550). : IEEE.

- Halle, J. P. (1993). Marshall Space Flight Center's Virtual Reality Applications Program. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 271-276). : NASA.
- Halliday, S., & Green, M. (1994). A Geometric Modeling and Animation System for Virtual Reality. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 71-86). : World Scientific Publishing Co, Inc.
- Halton, J. H. (1993). Geometry of a Three-Camera Headmounted System (TR-93-022): Chapel Hill, NC: Dept. of Computer Science, University of North Carolina.
- Hamill, B. W. (1994). Immersing People in Virtual Environments: Perceptual and Cognitive Considerations. John Hopkins APL Technical Digest, 15(2), 143-153.
- Hamilton, J. (1992, October 5). Virtual Reality. BusinessWeek(3286), 96-105.
- Han, D., Naimipour, K., & Chen, A. (1993). Engineering and scientific curriculum issues of including nanotechnology, robotics, life extension and virtual reality in basic requirements. In Proceedings of the FIE (Frontiers in Education) Twenty-Third Annual Conference, Engineering Education: Renewing America's Technology, (pp. 822). : IEEE.
- Hancock, D. (1993 October). "Prototyping' the Hubble Fix. IEEE Spectrum [special report: Virtual Reality], 30(10), 34-39.
- Hancock, W. R., Johnson, M. J., Rogers, J. C., & Ghrayeb, J. (1994). Meeting the Graphical Needs of the Electronic Battlefield. In Proceedings of the Cockpit Displays, (pp. 362-370). : SPIE.
- Hand, C. (1994). Other Faces of Virtual Reality. In Proceedings of the First International Conference, MHVR '94: Multimedia, Hypermedia, and Virtual Reality, (pp. 107-116). : Springer-Verlag.
- Hand, C. (1995). Creating hypermedia documents by doing: an alternative to authoring. In Proceedings of the IEE Colloquium on "The Authoring and Application of Hypermedia-Based User Interfaces", (pp. 3/1-3/3). : IEE.
- Hand, C., & Skipper, M. (1996). A Collaborative Environment for Role-Playing in Object Space. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Hand, C. (1996). Some User Interface Issues for Hypermedia Virtual Environments. In Proceedings of the Workshop on Virtual Environments and the WWW, Fifth International World-Wide Web Conference, (pp. unpagedinated). : .
- Hann, M., & Hubbard, R. (1993). Molecular Visualisation In Pharmaceutical Research. In Proceedings of the VR'93 Virtual Reality International 93: The Third Annual Conference on Virtual Reality, (pp. 122-125). : Meckler.
- Hann, R. L. (1993). A Conversation with Thomas A. Furness. CSERIAC Gateway, 4(3), 11.
- Hannaford, B. (1989). A Design Framework for Teleoperators with Kinesthetic Feedback. IEEE Transactions on Robotics and Automation, 5(4), 426-434.
- Hannaford, B., & Lee, P. (1990). Multi-Dimensional Hidden Markov Model of Telemanipulation Tasks with Varying Outcomes. In Proceedings of the 1990 IEEE International Conference on Systems, Man and Cybernetics, (pp. 127-133). : IEEE.
- Hannaford, B., Wood, L., McAfee, D. A., & Zak, H. (1991). Performance Evaluation of a Six-Axis Generalized Force-Reflecting Teleoperator. IEEE Transactions on Systems, Man and Cybernetics, 21(3), 620-633.

- Hannaford, B. (1994). Modeling and Stability Analysis of a Scaled Telemanipulation System. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 32-37). : IEEE.
- Hannaford, B., & Venema, S. (1995). Kinesthetic Displays for Remote and Virtual Environments. In T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 415-436). New York, NY: Oxford University Press.
- Hannaford, B., Buttolo, P., & MacLean, K. (1997). Introduction to Haptic Simulation. In Proceedings of the IEEE VRAIS '97: Virtual Collaborative Environments, (pp. unpaginated). : IEEE.
- Hansen, J. P., & Jakobsen, V. B. (1993). Validating the cognitive fidelity of simulated realities. In Proceedings of the Informatique '93, 2nd International Conference on Interface to Real and Virtual Worlds, (pp. 241-250). : EC2.
- Hanson, M. E., & Stubbs, J. B. (1996). Integrated Medical Environments: Magnifying the Healing Power of Information. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 84-88). Washington, DC: IOS Press.
- Happe, R.-T., & Rumpf, M. (1996). Characterizing Global Features of SImulation Data by Selected Local Icons. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 234-242). : SpringerWien.
- Harashima, H. (1993). Face, Expression and Communication. In Proceedings of the Third International Conference on Artificial Reality and Tele-Existence, ICAT '93, (pp. 71-80). : Japan Technology Transfer Association.
- Hardman, V., & Iken, M. (1996). Enhanced Reality Audio in Interactive Networked Environments. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 55-66). : Queen Mary & Westfield College.
- Harm, D. L., Guedry, F. E., Parker, D. E., & Reschke, M. F. (1993). Development and Implementation of Inflight Neurosensory Training for Adaptation/Readaption (INSTAR). In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 402-406). : NASA.
- Harm, D. L., Guedry, F. E., Parker, D. E., & Reschke, M. F. (1993). Development and Implementation of Inflight Neurosensory Training for Adaptation/Readaptation (INSTAR). In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. unpaginated). : NASA.
- Harmon, S. W., & Kenney, P. J. (1994). Virtual Reality Training Environments: Contexts and Concerns. *EMI: Educational Media International*, 31(4), 228-237.
- Harmon, R., Patterson, W., Ribarsky, W., & Bolter, J. (1996). The Virtual Annotation System. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 239-245). : IEEE Computer Society Press.
- Harreld, M. R., Valentino, D. J., & Karplus, W. J. (1996). The Virtual Aneurysm: Virtual Reality in Endovascular Therapy. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 12-20). Washington, DC: IOS Press.
- Harris, M. (1994 May). Entertainment Driven Collaboration. *Computer Graphics*, 28(2), 93-96.

Harriss, P., & McKellar, C. (1992). Realtime Lighting For Virtual Worlds. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 37-43). : Meckler Publishing.

Hart, J. C., & DeFanti, T. A. (1991). Efficient Antialiased Rendering of 3-D Linear Fractals. *Computer Graphics*, 25(4), 91-100.

Hartigan, J. M. (1993, May). Multimedia: The Marriage Broker for Television and Computers. *CD-ROM Professional*, 6(3), 69-71.

Harvey, B. E., & Alpert, S. (1996). Patient Safety and Efficacy as Measured by Clinical Trials and Regulatory Policy. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 75-82). Washington, DC: IOS Press.

Harwin, W. S. (1996). An overview of rehabilitation engineering research at the Delaware applied science and engineering laboratories. In *Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies*, (pp. unpaginated). : University of Reading.

Hashimoto, H., Kunii, Y., Buss, M., & Harashima, F. (1993). Dynamic Force Simulator for Force Feedback Human-Machine Interaction. In *Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93*, (pp. 209-215). : IEEE Service Center.

Haskell, I. D., & Wickens, C. D. (1988). Design and Evaluation of Three-Dimensional Displays for Aviation: A Consideration of the Critical Variables. In *Proceedings of the 1988 SID International Symposium*, (pp. 356-359). : SID.

Hassen, S., Kahn, M., & John, T. (1994). A 3-Dimensional Medical Data Visualization of Temporal/Spatial Relationships. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 70-72). : Aligned Management Associates.

Hattori, T. (1993). Stereoscopic Display Employing Head-Position Tracking Using Large Format Lenses. In *Proceedings of the Stereoscopic Displays and Applications IV*, (pp. 2-5). : SPIE.

Hauser, J. (1992). From Computers to Virtual Reality: A World of Change for Persons with Disabilities. In *Proceedings of the Virtual Worlds: Real Challenges*, (pp. 23-30). : Meckler Publishing.

Havaldar, P., Mi, S. L., & Medioni, G. (1996). View Synthesis from Unregistered 2-D Images. In *Proceedings of the Graphics Interface '96*, (pp. 61-69). : Canadian Information Process Society.

Haverstock, M. (1993, July). Virtual Gaming. *PCM: Personal Computer Magazine*, XI(1), 16-23.

Hawkes, R., Rushton, S., & Smyth, M. (1995). Update Rates and Fidelity in Virtual Environments. *Virtual Reality: Research, Development, and Applications*, 1(2), 99-108.

Hayakawa, Y., & Kawamura, S. (1993). A Pneumatic Bellows Manipulator with Force Sensing Ability. In *Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication*, (pp. 205-210). : IEEE.

Hayashi, K., Fujita, T., Hirota, K., Matsumoto, C., Nishiyama, S., & Murakami, K. (1991). Artificial Reality with Virtual Creature (IEICE Technical Report 91 [26(HC91-2)], 39-44): *Densi Joho Tushin Gakkai Gijutsu Kenkyu Hokoku*.

- Hayward, C. (1994). Listening to the Earth Sing. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 369-404). : Addison-Wesley Publishing Company.
- Heath, J. (1994). Virtual Reality Resource Guide. *AI Expert [Virtual Reality Special Report]*, 9(5), 32-45.
- Heckbert, P. S., & Garland, M. (1994). Multiresolution Modeling for Fast Rendering. In Proceedings of the Graphics Interface '94, (pp. 43-50). : Canadian Information Processing Society.
- Hedberg, S. (1993). See, Hear, Learn: Combining Multimedia and Virtual Reality's Audiovisual Environments with Knowledge-Based Systems. *Byte*, 18(8), 119-125.
- Hedberg, S. (1994). Combining AI and Multimedia. *Virtual Reality Special Report*, 1(4), 77+.
- Hedberg, S. (1994). VR Art Show at the Guggenheim. *Virtual Reality Special Report*, 1, 73-76.
- Hedberg, S. (1994). Desktop-based VR: Requirements and Costs. *Virtual Reality Special Report*, 1(3), 17-26.
- Hedberg, S. (1995). Caterpillar's Virtual Designer. *Virtual Reality Special Report*, 2(1), 31-34.
- Hedberg, J., & Alexander, S. (1994). Virtual Reality in Education: Defining Researchable Issues. *EMI: Educational Media International*, 31(4), 214-220.
- Heeter, C. (1992). Being There: The Subjective Experience of Presence. *Presence: Teleoperators and Virtual Environments*, 1(2), 262-271.
- Heeter, C. (1994). Gender Differences and VR: A Non-User Survey of What Women Want. *Virtual Reality World*, 2(2), 75-85.
- Heeter, C. (1994). Why Play (VR) Games? *Virtual Reality - Special Report*, 1, 67-72.
- Heeter, C., & Greene, D. D. (1996). Breast Cancer Lighthouse CD-ROM: Using Personal Stories for Patient and Clinician Education. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 649-651). Washington, DC: IOS Press.
- Heidersberger, B. (1995). Piazza Virtuale: Service Area, a 3D User and Communication Interface. In Proceedings of the Virtual Reality World '95, (pp. 231-232). : IDG Conferences and Seminars.
- Heim, M. (1994). he Art of Virtual Reality. *Virtual Reality Special Report*, 1(4), 9-24.
- Hekmatpour, A., Brown, G., Brault, R., & Bowen, G. (1993). FTDD973: A Multimedia Knowledge-Based System and Methodology for Operator Training and Diagnostics. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 161-170). : NASA.
- Held, R., & Durlach, N. (1991). Telepresence, time delay and adaptation. In S. R. Ellis (Ed.), *Pictorial Communication in Virtual and Real Environments*, (pp. 232-246). London, UK: Taylor & Francis.

Held, R. M., & Durlach, N. I. (1992). Telepresence. *Presence: Teleoperators and Virtual Environments*, 1(1), 109-112.

Helig, M. (1992). El Cine del Futuro. *Presence: Teleoperators and Virtual Environments*, 1(3), 279-294.

Heller, G., & Genetti, J. (1994). Simulation of Arthroscopic Surgery Using MRI Data. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 21-26). : NASA.

Helsel, S. K., & Roth, J. P. (Eds.). (1990). *Virtual Reality: Theory, Practice, and Promise*. Westport, CT: Meckler Corporation.

Helsel, S. K. (1991). Virtual Reality Ninety-One: Second Annual Conference on Virtual Reality, Artificial Reality and Cyberspace. Westport, CT: Meckler Corporation.

Helsel, S. K., & Roth, J. P. (1991, March/April). VR in Education: SALT Multimedia Conference. *CyberEdge Journal*, 2, 3.

Helsel, S. K. (1992). Virtual Reality Ninety-Two: Proceedings of the Third Annual Conference on Virtual Reality, Artificial Reality and Cyberspace. Westport, CT: Meckler Corporation.

Helsel, S. K., & Doherty, S. D. (Eds.). (1992). *Virtual Reality Market Place 1992*. Westport, Ct: Meckler Corporation.

Helsel, S. K. (1992). Virtual reality as a learning medium. *Instructional Delivery Systems*, 6(4), 4-5.

Helsel, S. (1992, May). Virtual Reality and Education. *Educational Technology*, 32, 38-42.

Helsel, S. K., & Chavez, W. (1995). VR World's Virtual Reality Market Place 1995. *VR World*, 3(4), 41-85.

Henderson, J. V. (1992). Cyberspace Representation of Vietnam War Trauma. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 77-103). : Meckler.

Hendrix, C., & Barfield, W. (1995). Presence in Virtual Environments as a Function of Visual and Auditory Cues. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 74-82). : IEEE Computer Society Press.

Hendrix, C., & Barfield, W. (1995). Relationship between Monocular and Binocular Depth Cues for Judgements of Spatial Informaiton and Spatial Instrument Design. *Displays*, 16(3), 103-113.

Hendrix, C., & Barfield, W. (1996). The Sense of Presence within Auditory Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 5(3), 290-301.

Hendrix, C., & Barfield, W. (1996). Presence within Virtual Environments as a Function of Visual Display Parameters. *Presence: Teleoperators and Virtual Environments*, 5(3), 274-289.

Henry, D. (1992). Spatial Perception in Virtual Environments: Evaluating an Architectural Application. Unpublished Unpublished Master of Science thesis, Seattle, WA: Department of Inter-Engineering, University of Washington.

Henry, T. R., Yeatts, A. K., Hudson, S. E., Myers, B. A., & Feiner, S. (1992). A Nose Gesture Interface Device: Extending Virtual Realities. *Presence: Teleoperators and Virtual Environments*, 1(2), 258-261.

- Henry, D., & Furness, T. (1993). Spatial Perception in Virtual Environments: Evaluating an Architectural Application. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 33-40). : IEEE Service Center.
- Henry, D., Troccaz, J., & Bosson, J.-L. (1996). Virtual Echography: The Simulation of Ultrasonographic Examination. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 176-183). Washington, DC: IOS Press.
- Heo, J., Jung, S., & Wohn, K. (1996). Exploiting the Frame Coherence in Visibility for Walk/Fly-Through. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 133-140). : ACM.
- Herder, J., Myszkowski, K., Kunii, T. L., & Ibusuki, M. (1996). A Virtual Reality Interface to an Intelligent Dental Care System. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 400-410). Washington, DC: IOS Press.
- Herder, J., & Cohen, M. (1996). Project Report: Design of a Helical Keyboard. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 139-142). : Addison-Wesley Publishing Company.
- Hereford, J., & Winn, W. (1994). Non-Speech Sound in Human-Computer Interaction: A Review and Design Guidelines. *Journal of Educational Computing Research*, 11(3), 211-233.
- Hersch, R., & Krummenacher, B. (1993). Parallel Image Storage and Retrieval. In N. M. Thalmann & D. Thalman (Eds.), *Virtual Worlds and Multimedia*, (pp. 13-22). New York, NY: John Wiley and Sons.
- Hettinger, L. J., & Riccio, G. E. (1992). Visually Induced Motion Sickness in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 1(3), 306-310.
- Hettinger, L. J., Nelson, W. T., & Haas, M. W. (1994). Applying Virtual Environment Technology to the Design of Fighter Aircraft Cockpits: Pilot Performance and Situation Awareness in a Simulated Air Combat Task. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 115-118). : Human Factors and Ergonomics Society.
- Hettinger, L. J. (1997). Perceiving in Virtual Environments: The Multisensory Nature of Real and Virtual Worlds. In Proceedings of the IEEE VRAIS '97: Virtual Collaborative Environments, (pp. unpaginated). : IEEE.
- Hezel, P. J., & Veron, H. (1993). Head-Mounted Displays for Virtual Reality. In Proceedings of the 1993 Summer Computer Simulation Conference, (pp. 19-21). : SCS.
- Hibbard, W. L., Paul, B. E., Santek, D. A., Dyer, C. R., Battaiola, A. L., & Voidrot-Martinez, M.-F. (1994). Interactive Visualization of Earth and Space Science Computations. *Computer*, 27(7), 65-72.
- Hibbard, B., Anderson, J., Paul, B., Jacob, R., Tyree, M., & Foster, I. (1995). Exploring Coupled Atmosphere-Ocean Models Using Vis5D and VisAD. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.
- Hibbard, W., Anderson, J., Foster, I., Paul, B., Jacob, R., Schafer, C., & Tyree, M. (1996). Exploring coupled atmosphere-ocean models using Vis5D. *International Journal of Supercomputer Applications*, 10(2), 211-222.
- Hiemenz, L., McDonald, J., Stredney, D., & Sessanna, D. (1996). A physiologically valid simulator for training residents to perform an epidural block. In

Proceedings of the 1996 Fifteenth Southern Biomedical Engineering Conference, (pp. 170-173). : IEEE.

Higgins, G. A., Merrill, G. L., Hettinger, L. J., Kaufman, C. R., Champion, H. R., & Satava, R. M. (1997). New simulation technologies for surgical training and certification current status and future projections. *Presence: Teleoperators and Virtual Environments*, 6(2), 160-172.

Higgins, G. A., Meglan, D. A., Raju, R., Merril, J. R., & Merril, G. L. (1997). Teleos(tm): Development of a Software Toolkit for Authoring Virtual Medical Environments. *Presence: Teleoperators and Virtual Environments*, 6(2), 241-252.

Hii, D. (1996). Hands-Free Image-Based VR System for the Masses: Virtual Museum. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 183-190). : ACM.

Hilbert, M., & Muller, W. (1996). Virtual Reality in Endonasal Surgery. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 237-245). Washington, DC: IOS Press.

Hill, M. (1992, October). What's New in Virtual Reality? *Electronic Learning*, 12(2), 10.

Hill, R. W., & Johnson, W. L. (1993). Impasse-Driven Tutoring for Reactive Skill Acquisition. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 93-110). : NASA.

Hill, R. W., Jr., & Johnson, H. L. (1994). Situated plan attribution for intelligent tutoring. In Proceedings of the Twelfth National Conference on Artificial Intelligence, (pp. 499-505). : MIT Press.

Hill, R. W., Jr., & Johnson, W. L. (1995). Situated plan attribution. *Journal of Artificial Intelligence in Education*, 6(1), 35-66.

Hinckley, K., Pausch, R., Goble, J. C., & Kassell, N. F. (1994). A Survey of Design Issues in Spatial Input. In Proceedings of the UIST '94, Seventh Annual Symposium on User Interface Software and Technology, (pp. 213-222). : ACM.

Hinckley, K., Pausch, R., Goble, J. C., & Kassell, N. F. (1994). Design Hints for Spatial Input. In Proceedings of the ACM SIGGRAPH, (pp. 13:1-13:9). : ACM.

Hinckley, K., Pausch, R., Downs, J. H., Proffitt, D., & Kassell, N. F. (1996). The Props-Based Interface for Neurosurgical Visualization. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 552-564). Washington, DC: IOS Press.

Hinckley, K., Pausch, R., Proffitt, D., Patten, J., & Kassell, N. (1997). Cooperative Bimanual Action. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 27-34). : ACM, Inc.

Hirata, R., Hoshino, H., Maeda, T., & Tachi, S. (1996). A Force and Shape Display for Virtual Reality System. *Transactions of the Virtual Reality Society of Japan*, 1(1), 23-32.

Hirose, M. (1991). Artificial Reality and Man-Machine Interface. *Journal of the Institute of Electrical Engineers of Japan*, 111(10), 831-834.

Hirose, M. (1991). Progress in Artificial Reality Technology. *Journal of the Japan Society of Precision Engineering*, 57(8), 1315-1320.

Hirose, M. (1992). Virtual Reality and Collaboration. *Journal of the Society of Instrument and Control Engineers*, 30(6), 457-464.

Hirose, M. (1992). Human Behavior in Virtual Environments. In Proceedings of the Human Vision, Visual Processing, and Digital Display III, (pp. 548-559). : SPIE.

Hirose, M., Yokoyama, K., & Shin'ichi, S. (1993). Transmission of Realistic Sensation: Development of a Virtual Dome. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 125-131). : IEEE Service Center.

Hirose, M., & Hirota, K. (1994). Surface Display: A Force Feedback System Simulating the Surface of an Object. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 251-254). : IEEE.

Hirose, M., Komori, S., & Nagumo, T. (1994). A Study on the Synthesis of Environmental Sounds. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 185-200). : World Scientific Publishing Co., Inc.

Hirose, M., Taniguchi, M., Nakagaki, Y., & Nihei, K. (1994 September). Virtual Playground and Communication Environments for Children. IEICE Transactions on Information and Systems, E77-D(9), 1330-1334.

Hirose, M., Takahashi, K., Koshizuka, T., Morinobu, T., & Watanabe, Y. (1995). An Alternate Way to Generate Virtual Worlds: A Study of Image Processing Technology for Synthetic Sensations. Presence: Teleoperators and Virtual Environments, 5(1), 61-71.

Hirose, M., Otsuka, R., & Hirota, K. (1996). A Basic Study on the Presentation of the Sensation of Motion using Motion-Base. Transactions of the Virtual Reality Society of Japan, 1(1), 16-22.

Hirose, M., Deffaux, G., & Nakagaki, Y. (1996 July). Development of an Effective Motion Capture System Based on Data Fusion and Minimal Use of Sensors. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 117-123). : ACM.

Hirota, K., & Hirose, M. (1993). Development of Surface Display. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 256-262). : IEEE Service Center.

Hirota, K., & Hirose, M. (1995). Simulation and Presentation of Curved Surface in Virtual Reality Environment Through Surface Display. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 211-216). : IEEE Computer Society Press.

Hirota, K., & Hirose, M. (1995 September). Providing Force Feedback in Virtual Environments. IEEE Computer Graphics and Applications, 15(5), 22-30.

Hitchner, L. E. (1995). Virtual Reality Software: Past, Present and Future. In Proceedings of the Virtual Reality World '95, (pp. 405-420). : IDG Conferences and Seminars.

Hoberman, P. (1995). Bar Code Hotel: Diverse Interactions of Semi-Autonomous Entities under the Partial Control of Multiple Operators. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems II, (pp. 303-310). : SPIE.

Hodges, L. F., & Davis, E. T. (1993). Geometric Considerations for Stereoscopic Virtual Environments. Presence: Teleoperators and Virtual Environments, 2(1), 34-43.

Hodges, L. F., Bolter, J., Mynatt, E., Ribarsky, W., & van Teylingen, R. (1993). Virtual Environments Research at the Georgia Tech GVU Center. Presence, 2(3), 234-243.

- Hodges, L. F., Bolter, J., Maynatt, E., Ribarsky, W., & van Teylingen, R. (1993). Virtual Environments Research at the Georgia Tech GVU Center. *Presence: Teleoperators and Virtual Environments*, 2(3), 234-243.
- Hodges, M. (1995). Computers and Dance. *Technology Review*, 98, 20(2).
- Hodges, L. F., Kooper, R., Meyer, T. C., Rothbaum, B. O., Opdyke, D., de Graaff, J. J., Willford, J. S., & North, M. M. (1995). Virtual environments for treating the fear of heights. *Computer*, 28(7), 27-34.
- Hodges, L. F., Rothbaum, B. O., Watson, B. A., Kessler, G. D., & Opdyke, D. (1996). Virtual Reality Exposure Therapy in the Treatment of Fear of Flying. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 722). Washington, DC: IOS Press.
- Hodges, L. F., Rothbaum, B. O., Watson, B., Kessler, G. D., & Opdyke, D. (1996). A Virtual Airplane for Fear of Flying Therapy. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 86-94). : IEEE Computer Society Press.
- Hodges, L. F., Watson, B. A., Kessler, G. D., Rothbaum, B. O., & Opdyke, D. (1996). Virtually Conquering Fear of Flying. *IEEE Computer Graphics and Applications*, 16(6), 42-49.
- Hoffman, H. M., Irwin, A. E., Baird, S., Cloor, C. M., Miyai, K., & Savoia, M. C. (1993). UCSD's MedPics: Implementation and Impact on the Curriculum. In Proceedings of the Seventeenth Annual Symposium on Computer Applications in Medical Care, (pp. 776-780). : McGraw-Hill.
- Hoffman, H. M. (1994). Virtual Reality and the Medical Curriculum: Integrating Extant and Emerging Technologies. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 73-76). : Aligned Management Associates.
- Hoffman, L., & Lopez, L. (1994, March). Mouse Tractors. *PCVR Magazine*(14), 11-13.
- Hoffman, H. G., Hullfish, K. C., & Houston, S. J. (1995). Virtual-Reality Monitoring. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 48-55). : IEEE Computer Society Press.
- Hoffman, H. M. (1995). Virtual reality meets medical education. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare, Medicine meets Virtual Reality III*, (pp. 130-136). Amsterdam, Netherlands: IOS Press.
- Hoffman, H. (1995). Virtual Reality-Multimedia Synthesis: Next-Generation Learning Environments for Medical Education. *Journal of Biocommunication (JBC)*, 22(3), 2-7.
- Hoffman, H. M., Murray, M., Irwin, A. E., & McCracken, T. (1996). Developing a Virtual Reality-Multimedia System for Anatomy Training. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 204-210). Washington, DC: IOS Press.
- Hoffman, H., Groen, J., Rousseau, S., Hollander, A., Winn, W., Wells, M., & Furness, T. (1996). Tactile Augmentation: Enhancing Presence in Virtual Reality with Tactile Feedback from Real Objects. In Proceedings of the 1996 Convention of the American Psychological Society (APS), (pp. in press). : APS.

Hoffman, H., Murray, M., Danks, M., Prayaga, R., Irwin, A., & Vu, D. (1996). A Flexible and Extensible Object-Oriented 3D Architecture: Application in the Development of Virtual Anatomy Lessons. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 461-466). Washington, DC: IOS Press.

Holden, L. (1992). Carnegie Mellon's STUDIO for creative enquiry and the Interdisciplinary Teaching Network (ITeN) and Interactive Fiction and the Networked Virtual Art Museum. *Bulletin of the American Society for Information Science*, 19(1), 56-57.

Holkner, B. (1996). EdMOO: One Approach to a Multimedia Collaborative Environment. In Proceedings of the EdTech '96 - Biennial Conference of the Australian Society for Educational Technology, Learning Technologies: Prospects and Pathways, (pp. unpaginated). : Australian Society for Educational Technology.

Hollan, J. H., Hutchins, E. L., & Weitzman, L. (1984). Steamer: An Interactive Inspectable Simulation-Based Training System. *AI Magazine*, 5, 15-27.

Holland, V. M., & Kaplan, J. D. (1995). Natural language processing techniques in computer-assisted language learning: Status and instructional issues. *Instructional Science*, 23(5-6), 351-380.

Hollander, A. (1994). An Exploration of Virtual Auditory Shape Perception. Unpublished Unpublished Master's Thesis, Seattle, WA: Human Interface Technology Laboratory.

Hollands, R. (1995). A Garage Shopping List. *VR World*, 3(4), 91-92.

Hollands, R. (1995). Where are the Powergloves? Where to also Find Software, Joysticks, Seats, Games, and More. *VR World*, 3(3), 60-61.

Holler, E., & Breitwieser, H. (1994). Telepresence Systems for Application in Minimally Invasive Surgery. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 77-80). : Aligned Management Associates.

Holler, E., & Neck, T. (1995). An ATM-Based Local Communication System for Telesurgery. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 137-146). Amsterdam: IOS Press.

Holloway, R., Fuchs, H., & Robinett, W. (1991). Virtual-worlds research at the University of North Carolina at Chapel Hill. In Proceedings of the Computer Graphics: Computer Animation, Virtual Reality and Visualisation, (pp. 181-196). : Blenheim Online.

Holloway, R. L. (1992). Viper: A Quasi-Real-Time Virtual-Worlds Application (TR-92-004): Chapel Hill, NC: Dept. of Computer Science, University of North Carolina.

Holloway, R., & Lastra, A. (1994). Virtual Environments: A Survey of the Technology (excerpts). In Proceedings of the ACM SIGGRAPH 1994, (pp. A:1-A:36). : ACM.

Holmgren, D. E., & Robinett, W. (1992). Scanned Laser Displays for Helmet Mounted Displays (TR-92-029): Chapel Hill, NC: Dept. of Computer Science, University of North Carolina.

Holmgren, D. E., & Robinett, W. (1993). Scanned Laser Displays for Virtual Reality: a Feasibility Study. *Presence*, 2(3), 171-184.

- Holmgren, D. E., & Robinett, W. (1993). Scanned Laser Displays for Virtual Reality: A Feasibility Study. *Presence: Teleoperators and Virtual Environments*, 2(3), 171-184.
- Holton, M. (1994 June). Strands, Gravity and Botanical Tree Imagery. *Computer Graphics Forum*, 13(2), 57-67.
- Homan, W. J. (1994). Virtual Reality: Real Promises and False Expectations. *EMI: Educational Media International*, 31(4), 224-227.
- Hon, D. (1992). An Evolution of Synthetic Reality and Tactile Interfaces. In *Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality*, (pp. 104-108). : Meckler.
- Hon, D. (1994). Ixion's Laparoscopic Surgical Skills Simulator. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 81-83). : Aligned Management Associates.
- Hon, D. (1994). Interactive Animation. *Modern Media*, 3(3), 24.
- Hon, D. (1994). Ixion's realistic medical simulations. *Virtual Reality World*, 2(4), 58-62.
- Hon, D. (1996). Medical Reality and Virtual Reality. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 327-341). Washington, DC: IOS Press.
- Honda, Y., Matsuda, K., Rekimoto, J., & Lea, R. (1996). Virtual Society - Extending the WWW to Support a Multi, User Interactive Shared 3D Environment. In *Proceedings of the Virtual Reality Modeling Language (VRML) Symposium '96*, (pp. 109-116). : ACM.
- Hoppenstein, R., & Bruder, D. G. (1994). 3-D Hard Copy: A Practical Solution. In *Proceedings of the Virtual Reality and Medicine: The Cutting Edge*, (pp. 139-140). : SIG-Advanced Applications, Inc.
- Hornof, A. J., & Kieras, D. E. (1997). Cognitive Modeling Reveals Menu Search is Both Random and Systematic. In *Proceedings of the CHI '97: Human Factors in Computing Systems*, (pp. 107-114). : ACM, Inc.
- Hoshi, H., Taniguchi, N., Morishima, H., Akiyama, T., Yamazaki, S., & Okuyama, A. (1996). Off-axial HMD Optical System Consisting of Aspherical Surfaces without Rotational Symmetry. In *Proceedings of the Stereoscopic Displays and Virtual Reality Systems III*, (pp. 234-242). : SPIE.
- House, G. (1994). Going to the Shopping Mall via VR. *Virtual Reality World*, 2(6), 41-43.
- House, G. (1995). Angel Studios Flying High. *VR World*, 3(1), 32-35.
- House, G. (1995). Paradigm Simulation, Inc.: Software Cuts Development Time for Real Time Graphics Applications. *VR World*, 3(3), 44-48.
- Howard, T. L. J., Hubbald, R. J., Murta, A. D., & West, A. J. (1995). Survey of Virtual Reality Activity in the United Kingdom (Technical Report 27): University of Manchester, Department of Computer Sciences.
- Howard, T. L. J., Hubbald, R. J., Murta, A. D., & West, A. J. (1996). 1995 Survey of Virtual Reality Activity in the United Kingdom (Technical Report Number 27(2nd Ed), Series ISSN 1356-9066): University of Manchester: Department of Computer Sciences.

- Howarth, P. A., & Costello, P. J. (1996). The Nauseogenicity of Using a Head-Mounted Display, Configured as a Personal Viewing System for an Hour. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 146-153). : Queen Mary & Westfield College.
- Howarth, P. A., & Costello, P. J. (1996). Visual Effects of Immersion in Virtual Environments: Interim results from the UK health and Safety Executive Study. In Proceedings of the SID International Symposium, (pp. 885-888). : Society for Information Display.
- Howlett, E. M. (1990). Wide Angle Orthostereo. In Proceedings of the Stereoscopic Displays and Applications, (pp. 210-223). : SPIE.
- Howlett, E. M. (1992). High-Resolution Inserts in Wide-Angle Head-Mounted Stereoscopic Displays. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 193-203). : SPIE.
- Hriber, D. C. (1993). Virtual Environment Training: Auxiliary Machinery Room (AMR) Watchstation Trainer. *Journal of Instruction Delivery Systems*, 7(2), 9-17.
- Hsu, G., & James, J. (1995). A sourceless, low-cost head tracker for virtual reality head mounted displays. In Proceedings of the WESCON/95 Conference Record, (pp. 706-708). : IEEE.
- Hsu, R., & Harashima, H. (1995). Tracking of head and arms from image sequences. *Transactions of the Institute of Electrical Engineers of Japan, Part C*, 115-C(2), 311-320.
- Huang, M., Papka, M., DeFanti, T., Levine, D., Turner, L., & Kettunen, L. (1995). Virtual Reality Visualization of Accelerator Magnets. In Proceedings of the High Performance Computing Symposium 1995 'Grand Challenges in Computer Simulation', 1995 Simulation Multiconference, (pp. 465-470). : SCS.
- Hubbard, P. M. (1993). Interactive Collision. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 24-31). : IEEE Society Press.
- Hubbard, P. M. (1994). Interactive Collision Detection. In Proceedings of the ACM SIGGRAPH 1994, (pp. 12:1-12:8). : ACM.
- Hubbold, R., Murta, A., West, A., & Howard, T. (1995). Design Issues for Virtual Reality Systems. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 224-236). New York, NY: SpringerWien.
- Hubbold, R. J., Dongbo, X., & Gibson, S. (1996). MAVERIK - The Manchester Virtual Environment Interface Kernel. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 11-21). : SpringerWien.
- Hudock, S. D. (1994). The application of educational technology to occupational safety and health training. *Occupational Medicine*, 9(2), 201-210.
- Hudson, R., Gunn, C., Francis, G. K., Sandin, D. J., & DeFanti, T. A. (1995). Mathenautics: Using Virtual Reality to Visit 3-D Manifolds. In Proceedings of the 1995 ACM Symposium on Interactive 3D Graphics, (pp. 167-170). : ACM.
- Hudson, R., Aarsvold, J. N., Chen, C. T., Chen, J., Davies, P., Disz, T., Foster, I., Griem, M., Kwong, M. K., & Lin, B. (1996). An Optical Microscopy System for 3D Dynamic Imaging. In Proceedings of the Three-Dimensional Microscopy: Image Acquisition and Processing III, (pp. 187-198). : SPIE.
- Hueyching, J. J. (1992). Mental Models: A Research Focus for Interactive Learning Systems. *Educational Technology Research and Development*, 40(3), 39-53.

Hughes, C. E., Moshell, J. M., Hughes, S. G., & Smith, M. (1992). Cooperative Problem Solving Among K-12 Students: The ExploreNet Project. In Proceedings of the Frontiers in Education '92, (pp. 522-526). : IEEE.

Hughes, F. (1993). Training technology challenges for the next decade and beyond. In Proceedings of the ICAT-VE: Intelligent Computer-Aided Training and Virtual Environments Conference, (pp. unpaginated). : NASA/Johnson Space Center.

Hughes, B., Kort, B., & Walters, J. (1994). Virtual space learning MariMUSE: connecting learners from kindergarten to 99. SIGCUE Outlook, 22(2), 17-22.

Hughes, C. E., & Moshell, J. M. (1994). ExploreNet. In C. E. Loeffler & T. Anderson (Eds.), The Virtual Reality Casebook, (pp. 118-122). New York, NY: Van Nostrand Rheinhold.

Hughes, B., & Walters, J. (1995). Children, MUDs, and Learning. San Francisco, CA: AERA.

Hughes, C. E., & Moshell, J. M. (1997). Shared virtual worlds for education: the ExploreNet experiment. Multimedia Systems, 5(2), 145-154.

Hunter, I. W., Doukoglou, T. D., Lafontaine, S. R., Charette, P. G., Jones, L. A., Sagar, M. A., Mallinson, G. D., & Hunter, P. J. (1993). A Teleoperated Microsurgical Robot and Associated Virtual Environment for Eye Surgery. Presence: Teleoperators and Virtual Environments, 2(4), 265-280.

Hunter, I. (1994). Teleoperated Microsurgical Robot and Associated Virtual Environment. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 85-89). : Aligned Management Associates.

Hyde, P. R., & Loftin, R. B. (Eds.). (1993). Proceedings of the Contributed Sessions: 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology. Houston, TX: NASA/Johnson Space Center.

Iavecchia, J. H., Iavecchia, H. P., & Roscoe, S. N. (1988). Eye Accommodation to Head-Up Virtual Images. Human Factors, 30(6), 689-702.

Ide, A., & Kato, H. (1995). Designing a system for cooperative learning through social interaction-'AlgoArena': a learning tool for programming. In Proceedings of the Symbiosis of Human and Artifact: the Sixth International Conference on Human-Computer Interactions (HCI International'95), (pp. 851-856). : Elsevier.

Igarashi, H., Noritake, J., Furuta, N., Shindo, K., Yamazaki, K., Okamoto, K., Yoshida, A., & Yamaguchi, T. (1994 September). Is the Virtual Reality a Gentle Technology for Humans? An Experimental Study of the Safety Features of a Virtual Reality SystemQ. IEICE Transactions on Information and Systems, E77-D(9), 1379-1384.

Ikeda, K. (1994 September). A Social Psychological Approach to "Networked" Reality. IEICE Transactions on Information and Systems, E77-D(9), 1390+.

Ikeda, T. (1996). A Multimedia VR System. In Proceedings of the International Conference on Multimedia Computing and Systems, (pp. 4-11). : IEEE Computer Society Press.

Ikehara, C., Cole, R. E., & Merritt, J. O. (1992). The Effects of Test Structure on Depth Perception Measurement Tasks. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 135-141). : SPIE.

- Ikehara, C., Cole, R. E., & Merritt, J. O. (1993). Effects of Perspective Distortion in Stereoscopic Video Displays. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 49-57). : SPIE.
- Ikehara, C., Cole, R. E., & Merritt, J. O. (1993). Visual-Motor Correspondence in Stereoscopic Video Displays for Teleoperated Manipulator Tasks. In Proceedings of the International Society for Optical Engineering, (pp. 167-176). : SPIE.
- Ikei, Y., Ikeno, A., & Fukuda, S. (1994). Vibratory Tactile Display for Textures. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 3-10). : NASA Conference Publications.
- Ikei, Y., Wakamatsu, K., & Fukuda, S. (1997). Texture Presentation by Vibratory Tactile Display - Image based presentation of a tactile texture. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 199-207). : IEEE Computer Society Press.
- Illman, D. L. (1994). Researchers Make Progress in Applying Virtual Reality to Chemistry. *Chemical and Engineering News*, 72(12), 22-25.
- Imamura, K., Nomura, J., Kurabayashi, K., Tamura, H., & Goto, M. (1996). Virtual Design System using Customer's Kansei Structural Model. *Transactions of the Virtual Reality Society of Japan*, 1(1), 40+.
- Impelluso, T. J., & Murakami, H. (1995). Physically-Based Virtual Reality. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.
- Impelluso, T. (1996). Physically Based Virtual Reality in a Distributed Environment. *Computer Graphics* [Focus: "Real" Virtual Reality], 30(4), 60-61.
- Ingram, R., & Benford, S. (1995). Improving the Legibility of Virtual Environments. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 211-223). New York, NY: SpringerWien.
- Ingram, R., & Benford, S. (1996). Building Virtual Cities: Applying Urban Planning Principles to the Design of Virtual Environments. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 83-91). : ACM.
- Ino, S., Shimizu, S., Odagawa, T., Sato, M., Takahashi, M., Izumi, T., & Ifukube, T. (1993). A Tactile Display for Presenting Quality of Materials by Changing the Temperature of Skin Surface. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 220-224). : IEEE.
- Inoue, T., & Ohzu, H. (1990). Measurement of the Human Factors of 3-D Images on a Large Screen. In Proceedings of the Large-Screen Projection Displays II, (pp. 104-107). : SPIE.
- Inoue, S., Ojika, T., Harayama, M., Kobayashi, T., & Imai, T. (1993). Two Dimensional Control for 6 DOF Hand Robot Teleoperator. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 171-176). : IEEE.
- Ip, H. H. S., & Chan, C. S. (1996). Script-based facial gesture and speech animation using a NURBS based face model. *Computers and Graphics*, 20(6), 881-891.
- Isdale, J. (1993). Cyberspace Development. *Software Development*, 1(6), 74-80.
- Ishii, M., & Sato, M. (1993). A 3D Interface Device with Force Feedback for Pick-and-Place Tasks. In Proceedings of the Third International Conference on Artificial Reality and Tele-Existence, ICAT '93, (pp. 105-110). : Japan Technology Transfer Association.

- Ishii, M., & Sato, M. (1993). A 3D Interface Device with Force Feedback: A Virtual Work Space for Pick-and-Place Tasks. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 331-335). : IEEE Service Center.
- Ishii, M., Sukanya, P., & Sato, M. (1994). A Virtual Work Space for Both Hands Manipulation with Coherency between Kinesthetic and Visual Sensation. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 84-90). : NASA Conference Publications.
- Ishii, M., Nakata, M., & Sato, M. (1994). Networked SPIDAR: A Networked Virtual Environment with Visual, Auditory, and Haptic Interfaces. *Presence: Teleoperators and Virtual Environments*, 3(4), 351-359.
- Ishii, M., Nakata, M., & Sato, M. (1994 Fall). Networked SPIDAR: a Networked Virtual Environment with Visual, Auditory, and Haptic Interactions. *Presence: Teleoperators and Virtual Environments*, 3(4), 351-359.
- Ishii, M., & Sato, M. (1994 Winter). A 3D Space Interface Device Using Tensed Strings. *Presence: Teleoperators and Virtual Environments*, 3(1), 81-86.
- Ishii, M., Sawatari, M., & Sato, M. (1995 February). A Virtual Work Space for Both-Hands-Operations. *Transactions of the Institute of Electrical Engineers of Japan, Part C*, 115-C(2), 230-235.
- Isler, V., Lau, R. W. H., & Green, M. (1996). Real-time Multi-resolution Modeling for Complex Virtual Environments. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 11-19). : ACM.
- Isono, H., Yasuda, M., Takemori, D., Kanayama, H., Yamada, C., & Chiba, K. (1992). 50-inch Autostereoscopic Full-Color 3D TV Display System. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 176-185). : SPIE.
- Istance, H., Spinner, C., & Howarth, P. (1996). Providing motor-impaired users with access to standard graphical user interface (GUI) software via eye-based interaction. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.
- Itoh, K. (1993). PC Based VR System. In Proceedings of the Third International Conference on Artificial Reality and Tele-Existence, ICAT '93, (pp. 63-70). : Japan Technology Transfer Association.
- Iu, S.-L., & Rogovin, K. W. (1996). Registering Perspective Contours with 3-D Objects without Correspondence, Using Orthogonal Polynomials. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 37-45). : IEEE Computer Society Press.
- Iwamoto, K., Tanie, K., Maeda, T., Ichie, K., Yasukawa, M., & Horiguchi, C. (1993). Development of an Eye Movement Tracking Type Head Mounted Display: System Proposal and Evaluation Experiments. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 287-291). : IEEE.
- Iwamoto, K., Katsumata, S., & Tanie, K. (1994). An eye movement tracking type head mounted display for virtual reality system: evaluation experiments of a prototype system. In Proceedings of the 1994 IEEE International Conference on Systems, Man, and Cybernetics: Humans, Information and Technology, (pp. 13-18). : IEEE.
- Iwamoto, K., & Tanie, K. (1995). High Resolution, Wide View Angle Head Mounted Display Using Eye Movement Tracking: System Structure and Evaluation

Experiments. In Proceedings of the RO-MAN '95, 4th IEEE International Workshop on Robot and Human Communication, (pp. 289-294). : IEEE.

Iwamoto, K., Tanie, K., & Maeda, T. (1996). Study on the eye movement tracking type head mounted display-investigation of the image display method which can present high resolution images at the intensional visual area. Transactions of the Institute of Electronics, Information and Communication Engineers D-II, J79D-II(5), 879-888.

Iwata, H. (1990). Artifical Reality with Force-Feedback: Development of Desktop Virtual Space with Compact Master Manipulator. Computer Graphics, 24(4), 165-170.

Iwata, H., & Matsuda, K. (1992). Haptic Walkthrough Simulator: Its Design and Application to Studies on Cognitive Map. In Proceedings of the ICAT '92: the Second International Conference on Aritfical Reality and Tele-existence, (pp. 185-192). : Japan Technology Transfer Association.

Iwata, H. (1993). Pen-based Haptic Virtual Environment. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 287-292). : IEEE Service Center.

Iwata, H., & Noma, H. (1993). Volume Haptization. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 16-23). : IEEE Society Press.

Iwata, H., & Sato, M. (1993). Artificial Life in Haptic Virtual Environment. In Proceedings of the Third International Conference on Artificial Reality and Tele-Existence, ICAT '93, (pp. 91-96). : Japan Technology Transfer Association.

Iwata, H., & Fujii, T. (1996). Virtual Perambulator: A Novel Interface Device for Locomotion in Virtual Environment. In Proceedings of the IEEE 1996 Virtual Reality Annual International Symposium (VRAIS), (pp. 60-65, 265). : IEEE Computer Society Press.

Jackson, P. (1993). Applications of virtual reality in training simulation. In K. Warwick, J. Gray, & D. Roberts (Eds.), *Virtual Reality in Engineering*, (pp. 121-136). London, UK: IEE.

Jackson, J. A., & Francioni, J. M. (1994). Synchronization of Visual and Aural Parallel Program Performance Data. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 291-306). : Addison-Wesley Publishing Company.

Jackson, B. G., & Rosenberg, L. B. (1995). Force Feedback and Medical Simulation. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 147-151). Amsterdam: IOS Press.

Jacob, R. J. K., Leggett, J. J., Myers, B. A., & Pausch, R. (1993). Interaction Styles and Input/Output Devices. *Behaviour and Information Technology*, 12(2), 69-79.

Jacob, R. J. K. (1995). Eye Tracking in Advanced Interface Design. In T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 258-291). New York, NY: Oxford University Press.

Jacob, R. J. K. (1996 March). Human-computer Interaction: Input Devices. *ACM Computing Surveys*, 28(1), 177-180.

Jacobini, S., & McCreary, K. (1994, July). Strategic Alliances in High Technology. *The Red Herring*(12), 61-62.

Jacobsen, S. C., Knutti, D. F., & Douglass, R. J. (1994). Apparatus for simulating mobility of a human, U.S. Patent Server Database, : Sarcos Group.

- Jacobsen, S. C. (1994). High density, three-dimensional, intercoupled optical sensor circuit, U.S. Patent Database, . U.S.A.: Sarcos Group.
- Jacobson, R. (1991). Televirtuality: "Being There" in the 21st Century (TR-HITL-M-90-1): Seattle, WA: University of Washington, Human Interface Technology Lab.
- Jacobson, L. (1992). CyberArts: Exploring Art and Technology. San Francisco, CA: Miller-Freedman, Inc.
- Jacobson, R. (1992). Where in the (Virtual) World Are We? Building a Virtual Worlds Industry. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 75-84). : Meckler Publishing.
- Jacobson, R. (1992). Televirtuality: Networked Experience. In Proceedings of the Virtual Reality International 92, Impacts and Applications, (pp. 44-52). : Meckler Publishing.
- Jacobson, R. (1992, April). The Ultimate User Interface. Byte, 175-181.
- Jacobson, L. (1992, July). Virtual Reality Glossary. AI Expert, 51-54.
- Jacobson, R. (1993 November/December). After the "Virtual Reality" Gold Rush: The Virtual Worlds Paradigm. Computers and Graphics, 17(6), 695-698.
- Jacobson, L. (1993, July). Reading, 'Riting, 'Rithmetic, and Reality. Virtual Reality 93 Special Report, 39-42.
- Jacobson, L. (1994). Will the Edge Succeed? In Proceedings of the SIGGRAPH 94, (pp. 171). : ACM SIGGRAPH.
- Jacobson, L. (1994). The Virtual Art World of Car Loeffler. Virtual Reality World, 2(5), 32-38.
- Jacobson, R. (1994). Virtual Worlds: A New Type of Design Environment. Virtual Reality World, 2(3), 46-52.
- Jacobson, R. (1994). Applying the Virtual Worlds Paradigm to Mapping and Surveying Data. Virtual Reality World, 2(5), 60-69.
- Jacobson, B. (1995). Business, Networking, and Careers: VR in Business, DIS, and How to Work in a VR Business. VR World, 3(3), 68-69.
- Jacobson, L. (1996). Virtual Reality Primer Revisited. Iris Universe, 36, 28-32.
- Jacobus, C., Jacobus, H., Mitchell, B., Riggs, A. J., & Taylor, M. (1993). The Virtual Toolbox. In Proceedings of the 21st AIPR Workshop, Interdisciplinary Computer Vision: An Exploration of Diverse Applications, (pp. 2-17). : SPIE.
- Jacoby, R. H., & Ellis, S. R. (1992). Using Virtual Menus in a Virtual Environment. In Proceedings of the Visual Data Interpretation, (pp. 39-48). : SPIE.
- Jacoby, R., Ferneau, M., & Humphries, J. (1994). Gestural Interaction in a Virtual Environment. In Proceedings of the Stereoscopic Display and Virtual Reality Systems: The Engineering Reality of Virtual Reality, (pp. 355-364). : SPIE.
- Jacoby, R. H., Adelstein, B. D., & Ellis, S. R. (1996). Improved Temporal Response in Virtual Environments through System Hardware and Software Reorganization. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 271-284). : SPIE.
- Jakimowicz, J. J. (1994). The European Association for Endoscopic Surgery recommendations for training in laparoscopic surgery. Annales Chirurgiae et Gynaecologiae, 83(2), 137-141.

Jalili, R., Kirchner, P. D., Montoya, J., Duncan, S., Genevriez, L., Lipscomb, J. S., Wolfe, R. H., & Codella, C. F. (1995). A Visit to the Dresden Frauenkirche. *Presence: Teleoperators and Virtual Environments*, 5(1), 87-94.

James, K. R., & Caird, J. K. (1995). The Effects of Optic Flow, Propiception, and Texture on Novice Locomotion in Virtual Environment. In Proceedings of the Human Factors and Ergonomics Society, (pp. 1405-1409). : Human Factors and Ergonomics Society.

Jameson, D. H. (1994). Sonnet: Audio-Enhanced Monitoring and Debugging. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 253-266). : Addison-Wesley Publishing Company.

Janin, A. L., Mizell, D. W., & Caudell, T. P. (1993). Calibration of Head-Mounted Displays for Augmented Reality Applications. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 246-255). : IEEE.

Janin, A., Zikan, K., Mizell, D., Banner, M., & Sowizral, H. (1994). A videometric head tracker for augmented reality applications. In Proceedings of the Telemanipulator and Telepresence Technologies, (pp. 308-315). : SPIE.

Jannin, P., Bouliou, A., Journet, E., & Scarabin, J. M. (1996). A Ray-Traced Texture Mapping for Enhanced Virtuality in Image-Guided Neurosurgery. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 553-563). Washington, DC: IOS Press.

Jaques, M. W. S., Strickland, P., & Oliver, T. J. (1994). Design by manufacturing simulation: Concurrent engineering meets virtual reality. In Proceedings of the Mechatronics: The Basis for New Industrial Development, (pp. 637-6642). : Computer Mech. Publications.

Jaramaz, B., DiGoria, A. M., III, & O'Toole, R. V., III. (1994). Integrating Finite Element Analyses into Pre-operative Surgical Planning and Simulation of Total Joint Replacement Surgery. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 34-37). : Aligned Management Associates.

Jayaram, S. (1997). Applying VR to Engineering Design, Analysis, and Manufacturing. In Proceedings of the IEEE VRAIS '97: Virtual Collaborative Environments, (pp. 1-87). : IEEE.

Jennett, P., Watanabe, M., Igras, E., Premkumar, K., & Hall, W. (1996). Telemedicine and Security: Confidentiality, Integrity, and Availability: A Canadian Perspective. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 286-298). Washington, DC: IOS Press.

Jense, G. J., & Kuijper, F. (1993). Applying Virtual Environments to Training and Simulation [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.

Jense, G. J. H. (1995). Virtual Environments for Design Training and Decision Support. In Proceedings of the Virtual Reality World '95, (pp. 181-192). : IDG Conferences and Seminars.

Jense, H., & Donkers, K. (1996). Dynamic Management of Geographic Data in a Virtual Environment. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 149-158). : SpringerWien.

Jenson, J. F., & Hill, J. W. (1996). Advanced Telepresence Surgery System Development. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 107-117). Washington, DC: IOS Press.

Jepson, W., Liggett, R., & Friedman, S. (1995). An Environment for Real-time Urban Simulation. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 165-166). : ACM.

Jepson, W., Liggett, R., & Friedman, S. (1995). Virtual Modeling of Urban Environments. *Presence: Teleoperators and Virtual Environments*, 5(1), 72-86.

Jiann, R.-W., & Ming, O. (1994). Reducing the latency in head-mounted displays by a novel prediction method using Grey System theory. *Computer Graphics Forum*, 13(3), C/503-512.

Jianzhong, L., & Ahlers, R. J. (1990). New Stereoscopic Vision System for the Automated Visual Inspection. In Proceedings of the Intelligent Robots and Computer Vision VIII: Algorithms and Techniques, (pp. 401-408). : SPIE.

Jih, F.-W., Azuma, R., Bishop, G., Chi, V., Eyles, J., & Fuchs, H. (1990). Tracking a head-mounted display in a room-sized environment with head-mounted cameras. In Proceedings of the Helmet-Mounted Displays II, (pp. 47-57). : SPIE.

Jih, F.-W., Chi, V., & Fuchs, H. (1990). A real-time optical 3D tracker for head-mounted display systems. In Proceedings of the 1990 Symposium on Interactive 3D Graphics, (pp. 205-215). : ACM.

Johansson, M., & Astrom, K. J. (1996). Virtual interactive systems for control education. In Proceedings of the 35th IEEE Conference on Decision and Control, (pp. 3888-3889). : IEEE.

Johnson, A. D., & Cutt, P. S. (1992). The Tactile Sense: An Untapped Channel in Man-Machine Interfaces. In Proceedings of the Virtual Worlds: Real Challenges, (pp. 31-40). : Meckler Publishing.

Johnson, C. R., MacLeod, R. S., & Matheson, M. A. (1993). Computational medicine: bioelectric field problems. *Computer*, 26(10), 59-67.

Johnson, A., & Fotouhi, F. (1994). The SANDBOX: a Virtual Reality Interface to Scientific Databases. In Proceedings of the Seventh International Working Conference on Scientific and Statistical Database Management, (pp. 12-21). : IEEE Computer Society Press.

Johnson, W. L. (1994). Agents that learn to explain themselves. In Proceedings of the Twelfth National Conference on Artificial Intelligence, (pp. 1257-1263). : MIT Press.

Johnson, W. L. (1995). Pedagogical agents in virtual learning environments. In Proceedings of the ICCE 95: International Conference on Computers in Education, (pp. 41-48). : Association for Advancement of Computer Education.

Johnson, W. L., & Tambe, M. (1995). Using machine learning to extend autonomous agent capabilities. In Proceedings of the Summer Computer Simulation Conference, (pp. 275-80). : SCS.

Johnson, G. (1996). Narrowbody Aircraft Interior Design System. *Computer Graphics [Focus: "Real" Virtual Reality]*, 30(4), 58.

Johnson, D. A., Shaw, J. H., & Rushton, S. K. (1996). Virtual reality enriched environments, physical exercise and neuropsychological rehabilitation. In Proceedings of

the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.

Johnston, A., & Passmore, P. J. (1993). Do We Have a Symbolic Pipeline Architecture for the Encoding and Representation of 3-D Shape? [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.

Johnston, R., & Willey, S. (1995). Development of a Commercial Retinal Display. In *Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements*, (pp. 2-13). : SPIE.

Johnston, R., Bhoyrul, S., Way, L., Satava, R., McGovern, K., Fletcher, J. D., Rangel, S., & Loftin, R. B. (1996). Assessing a Virtual Reality Surgical Skills Simulator. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 608-617). Washington, DC: IOS Press.

Jonassen, D. H. (Ed.). (1996). *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology*. New York, NY: Macmillan.

Jones, K. C. (1993). Manufacturing Simulation Using Virtual Reality. Unpublished Unpublished Master's thesis, Seattle, WA: Dept. of Engineering, University of Washington.

Jones, G., & Hankinson, T. (1994). Simulation-based design for ship design and acquisition. In *Proceedings of the 8th International Conference on Computer Applications in Shipbuilding*, (pp. 14/31-14/37). : Berry Rasmussen Reklam.

Jones, D. B., Brewer, J. D., & Soper, N. J. (1995). Next-Generation 3D Videosystems May Improve Laparoscopic Task Performance. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 152-160). Amsterdam: IOS Press.

Jones, D. W. (1996). DIS: Going Beyond Single Simulation Environments. *Embedded Systems Programming*, 9(1), 76-78, 80.

Jones, S. B., & Satava, R. M. (1996). Virtual Endoscopy of the Head and Neck: Diagnosis Using Three-Dimensional Visualization and Virtual Representation. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 152-156). Washington, DC: IOS Press.

Jones, L. (1997). Dextrous Hands: Human, Prosthetic, and Robotic. *Presence: Teleoperators and Virtual Environments*, 6(1), 29-56.

Jons, O. P. (1994). Virtual environments in the development of ships. In *Proceedings of the 8th International Conference on Computer Applications in Shipbuilding*, (pp. 14/39-14/57). : Berry Rasmussen Reklam.

Jons, O. P., Ryan, J. C., & Jones, G. W. (1994 May). Using Virtual Environments in the Design of Ships. *Naval Engineers Journal*, 91-106.

Joukhadar, A., Wabbi, A., & Laugier, C. (1996). Fast Contact Localisation between Deformable Polyhedra in Motion. In *Proceedings of the Computer Animation '96*, (pp. 126-135). : IEEE Computer Society Press.

Judson, I., Stevens, R., Disz, T., Papka, M., Olson, B., & Wu, Y. (1995). Telerobotics/Telepresence. In *Proceedings of the Supercomputing '95*, (pp. unpaginated). : ACM.

- Kaczmarek, K. A., & Bach-Y-Rita, P. (1995). Tactile Displays. In T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 349-414). New York, NY: Oxford University Press.
- Kafai, Y., & Resnick, M. (Eds.). (1996). *Constructionism in Practice: Designing, Thinking, and Learning in a Digital World*. Mahwah, NJ: Lawrence Erlbaum.
- Kahaner, D. (1993). Virtual Reality in Japan. *IEEE Micro*, 13(2), 66-73.
- Kahaner, D. (1994). Japanese Activities in Virtual Reality. *IEEE Computer Graphics and Applications*, 14(1), 75-78.
- Kahaner, D. (1994 January). Japanese Activities in Virtual Reality. *IEEE Computer Graphics and Applications*, 14(1), 75-78.
- Kalawsky, R. S. (1991). State of Virtual Reality in the UK. In Proceedings of the IEE Colloquium on 'Real World' Visualization - Virtual World - Virtual Reality, (pp. 1/1). : IEE.
- Kalawsky, R. S. (1991). From Visually Coupled Systems to Virtual Reality: An Aerospace Perspective. In Proceedings of the Computer Graphics, Computer Animation, Virtual Reality, Visualization, (pp. 121-130). : Blenheim On-line.
- Kalawsky, R. S. (1992). Realities of Using Visually Coupled Systems for Training Applications. In Proceedings of the Helmet-Mounted Displays III, (pp. 72-82). : SPIE.
- Kalawsky, R. S. (1992). The realities of using visually coupled systems for training applications. In Proceedings of the Helmet-Mounted Displays III, (pp. 72-82). : SPIE.
- Kalawsky, R. (1993). *The Science of Virtual Reality and Virtual Environments*. Reading, MA: Addison-Wesley.
- Kalawsky, R. S. (1993). Science and Engineering Issues of Virtual Environment Systems. In Proceedings of the 10th Anniversary Eurographics UK Conference, (pp. 137-146). : Eurographics UK Chapter.
- Kalawsky, R. S. (1996). Exploiting Virtual Reality Techniques in Education and Training: Technological Issues : Loughborough University of Technology, Advanced VR Research Centre.
- Kalawsky , R. S. (1992). Beyond The Super Cockpit. In Proceedings of the Virtual Reality International 92, Impacts and Applications, (pp. 69-77). : Meckler Publishing.
- Kall, B. A., Kelly, P. J., Stiving, S. O., & Goerss, S. J. (1994). Integrated Multimodality Visualization in Stereotactic Neurologic Surgery. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 93-94). : Aligned Management Associates.
- Kallman, E. A. (1993 Spring). Ethical Evaluation: A Necessary Element in Virtual Environment Research. *Presence: Teleoperators and Virtual Environments*, 2(2), 143-146.
- Kamae, T. (1994 September). Networked Reality, What? *IEICE Transactions on Information and Systems*, E77-D(9), 1318-1320.
- Kameyama, K., & Ohtomi, K. (1991). The Application of Virtual Reality to Mechanical Design. *Denshi Joho Tushin Gakkai Gijutsu Kenkyu Hokoku* (IEICE Technical Report), 91(26), 55-60.

Kameyama, K., & Ohtomi, K. (1993). A Direct 3-D Shape Modeling System. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 519-524). : IEEE Service Center.

Kameyama, K., Ohtomi, K., & Fukui, Y. (1993). Interactive Volume-Scanning 3D Display with an Optical Relay System and Multidimensional Input Devices. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 12-20). : SPIE.

Kameyama, K.-I., & Ohtomi, K. (1993 Spring). A Shape Modeling System with a Volume Scanning Display and Multisensory Input Device. *Presence: Teleoperators and Virtual Environments*, 2(2), 104-111.

Kanade, T. (1996). Immersion into Visual Media: New Applications of Image Understanding. *IEEE Expert*, 11(1), 73-80.

Kanade, T., Narayanan, I. J., & Rander, P. W. (1996). Virtualized reality: being mobile in a visual scene. In Proceedings of the ECCV '96 International Workshop: Object Representation in Computer Vision II, (pp. 273-285). : Springer-Verlag.

Kanamaru, N., & Takahashi, T. (1993). A New Interface for 3D Manipulation. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 282-286). : IEEE.

Kandel, S., Boe, L.-J., & Orliaguet, J. P. (1993). Visual Detection of Coarticulatory Anticipation or...Guessing What Has Not Yet. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, (pp. 148-154). : IEEE Service Center.

Kaneko, T., & Okamoto, S. (1996). View Interpolation with Range Data for Navigation Applications. In Proceedings of the Computer Graphics International, (pp. 90-95). : IEEE Computer Society Press.

Kaplan, K. L. (1994). Project Description: Surgical Room of the Future. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 95-98). : Aligned Management Associates.

Kaplan, K., Hunter, I., & Durlach, N. I. (1995). A Virtual Environment for a Surgical Room of the Future. In Proceedings of the Virtual Reality World '95, (pp. 159-164). : IDG Conferences and Seminars.

Kaplan, K., Hunter, I., Durlach, N. I., Schodek, D. L., & Rattner, D. (1995). A Virtual Environment for a Surgical Room of the Future. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 161-167). Amsterdam: IOS Press.

Karavis, A., & Schreyer, A. (1991). The Design and Evaluation of Fast-Jet Helmet Mounted Displays. In Proceedings of the AGARD 517, Helmet Mounted Displays and Night Vision Goggles (AGARD-CP-517), (pp. 2-1 to 2-7). : AGARD.

Karlgren, J., Bretan, I., Frost, N., & Jonsson, L. (1995). Interaction Models, Reference, and Interactivity in Speech Interfaces to Virtual Environments. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 149-159). New York, NY: SpringerWien.

Karnow, C. E. A. (1993, Summer). Implementing the First Amendment in Cyberspace. *Virtual Reality World*, 1(2), j.

Karnow, C. E. A. (1994). The Uneasy Treaty of Technology and Law. *Virtual Reality Special Report*, 1, 33-38.

- Karnow, C. E. A. (1994). The Electronic Persona: A New Legal Entity. *Virtual Reality World*, 2(1), 37-40.
- Karr, C. R., Reece, D., & Franceschini, R. (1997). Synthetic soldiers [military training simulators]. *IEEE Spectrum*, 34(3), 39-45.
- Karron, D. B. (1994). The SpiderWeb Algorithm for Extracting 3-D Objects from Volume Data. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 172-194). : SIG-Advanced Applications, Inc.
- Kashiwa, K. I., Mitani, T., Tezuka, T., & Yoshikawa, H. (1995). Development of machine-maintenance training system in virtual environment. In Proceedings of the ROMAN'95: 4th IEEE International Workshop on Robot and Human Communication, (pp. 295-300). : IEEE.
- Kassell, N. F., Downs, J. H., & Graves, B. S. (1996). Telepresence in Neurosurgery: The Integrated Remote Neurosurgical System. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 411-419). Washington, DC: IOS Press.
- Katkere, A., Schlenzig, & Jain, R. (1996). VRML-Based WWW Interface to MPI Video. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium, (pp. 25-32). : ACM.
- Katz, W. (1994). ROADNET-distributed interactive simulation applied to driver training, city planning, and transportation research. In Proceedings of the 1994 Summer Computer Simulation Conference, Twenty-Sixth Annual Summer Computer Simulation Conference, (pp. 936-941). : SCS.
- Katz, W. (1995). Advanced Topics in Virtual Reality Networking. In Proceedings of the Virtual Reality World '95, (pp. 399-402). : IDG Conferences and Seminars.
- Katz, W. (1996). Multiplayer Game Networking Consortium Debuts Technology at SIGGRAPH 96. *Computer Graphics* [Focus: "Real" Virtual Reality], 30(4), 57.
- Kauffman, A., & Bakalash, R. (1989). The Cube System as a 3D Medical Workstation. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 189-205). : SPIE.
- Kaufman, A. E., Bandopadhyay, A., & Shaviv, B. D. (1993). An Eye Tracking Computer User Interface. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 120-121). : IEEE Society Press.
- Kaufman, L., Kramer, D., Goldhaber, D., Hawryszko, C., Gronemeyer, D. H. W., & Fukatsu, H. (1994). Real Reality: Being There with Open Access MRI. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 99-102). : Aligned Management Associates.
- Kaufman, D. (1996). Virtual Realities. *IRIS Universe* [special issue on VR](25), 44-47.
- Kaufman, S., Poupyrev, I., E., M., Billinghamurst, M., Oppenheimer, P., & Weghorst, S. (1996). New Interface Metaphors for Complex Information Space Visualization: an ECG Monitor Object Prototype. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 131-140). Washington, DC: IOS Press.
- Kaufman, D. M., & Bell, W. (1996). Teaching and Assessing Clinical Skills Using Virtual Reality. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst

(Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 467-472). Washington, DC: IOS Press.

Kaufman, D. M., & Jennett, P. A. (1996). Preparing our Future Physicians: Integrating Medical Informatics into the Undergraduate Medical Education Curriculum. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 543-546). Washington, DC: IOS Press.

Kaul, P. (1994). Human/Dolphin Virtual Reality World Concept. In Proceedings of the SIGGRAPH '94: Visual Proceedings, (pp. 180). : ACM SIGGRAPH.

Kawai, Y., & Tomita, F. (1996). Interactive Tactile Display System. In Proceedings of the Assets '96: the Second Annual ACM Conference on Assistive Technologies, (pp. 45-50). : ACM SIGGRAPH.

Kaye, M. G., Ineson, J., Jarrett, D. N., & Wickham, G. (1990). Evaluation of Virtual Cockpit Concepts During Simulated Missions. In Proceedings of the Helmet-Mounted Displays II, (pp. 236-245). : SPIE.

Kaye, J., Metaxas, D., Badler, N., Clarke, J., & Webber, B. (1996). Linking Anatomy and Physiology in Modeling Respiratory Mechanics. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 580-589). Washington, DC: IOS Press.

Kazman, R. (1993). Making WAVES: On the Design of Architectures for Low-end Distributed Virtual Environments. In Proceedings of the IEEE Virtual Reality Annual International Symposium, (pp. 443-449). : IEEE.

Keller, H., Stolz, H., Ziegler, Z., & Brauni, T. (1993). Virtual Mechanics: Simulation and Animation of Real Body Systems : AERO.

Keller, P. R., & Keller, M. M. (1993). *Visual Cues: Practical Data Visualization*. Los Alamitos, CA: IEEE Computer Society Press.

Keller, P. E., Kouzes, R. T., Kangas, L. J., & Hashem, S. (1995). Transmission of Olfactory Information for Telemedicine. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 168-172). Amsterdam: IOS Press.

Kelley, R. V., Jr. (1994). Move Over, Dr. Frankenstein. *Virtual Reality [Special Report]*, 1, 19-25.

Kelly, R. (1993). The Promise of VR for Network Management. *Virtual Reality World*, 1(2), d-f.

Kelly, R. V. (1993, September). After the Shoot-'Em-Up: Entertainment's Future. *AI Expert [Virtual Reality '93: Fall Special Report]*, 7-10.

Kelly, P. J. (1994). Quantitative Virtual Reality Surgical Simulation, Minimally Invasive Stereotactic Neurosurgery and Frameless Stereotactic Technologies. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 103-108). : Aligned Management.

Kelly, R. V., Jr. (1994). VR and the Educational Frontier. *Virtual Reality Special Report*, 1(3), 7-26.

Kelly, D. (1994, January). Envisage 3D. *3D Artist*(14), 12-13, 17.

Kelly, R. V., Jr. (1995). Virtual Reality and Interactive Television. *Virtual Reality Special Report*, 2(1), 15-20.

Kelso, M. T., Weyhrauch, P., & Bates, J. (1993). Dramatic Presence. *Presence: Teleoperators and Virtual Environments*, 2(1), 1-15.

Kennedy, R. (1992). Differences in Simulator Sickness Profiles in Different Simulators. In Proceedings of the 1992 IMAGE Conference VI, (pp. 29-40). : IMAGE Society.

Kennedy, R. S., Lane, N. E., Lilienthal, M. G., Berbaum, K. S., & Hettinger, L. J. (1992). Profile Analysis of Simulator Sickness Symptoms: Application to Virtual Environment Systems. *Presence: Teleoperators and Virtual Environments*, 1(3), 295-301.

Kennedy, P. J., & Palumbo, D. B. (1993). Instructional and Technological Development Activities of a Synthetic Solar System Exploration Environment. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 1). : NASA.

Kennedy, R. S., Berbaum, K. S., Hettinger, L., & Lilienthal, M. (1993). Ataxia and Other Posteffects of Flight Simulators: Should Virtual Reality Systems Have Warning Labels? In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 407). : NASA.

Kennedy, R. S., & Lilienthal, M. G. (1994). Measurement and Control of Motion Sickness Aftereffects from Immersion in VR. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 111-119). : SIG-Advanced Applications, Inc.

Kennedy, R. S., & Lilienthal, M. G. (1995). Implications of Balance Disturbances Following Exposure to Virtual Reality Systems. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 35-39). : IEEE Computer Society Press.

Kennedy, R. S., Berbaum, K. S., Dunlap, W. P., & Hettinger, L. J. (1996). Developing Automated Methods to Quantify the Visual Stimulus for Cybersickness. In Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting, (pp. 1126-1130). :

Kennedy, R. S., & Stanney, K. M. (1996). Postural Instability Induced by Virtual Reality Exposure: Development of a Certification Protocol. *International Journal of Human-Computer Interaction*, 8(1), 25-47.

Kenyon, R. V., DeFanti, T. A., & Sandin, D. J. (1995). Visual Requirements for Virtual-Environment Generation. *Journal of the Society for Information Display*, 3(4), 211-214.

Kenyon, R. V., & Afenya, M. B. (1995). Training in Virtual and Real Environments. *Annals of Biomedical Engineering*, 23(4), 445-455.

Kerbel, G. D., Pierce, T., Milovich, J. L., Shumaker, D. E., Verlo, A., Waltz, R. E., Hammett, G. W., Beer, M. A., & Dorland, B. (1996). Interactive scientific exploration of gyrofluid tokamak turbulence. *International Journal of Supercomputer Applications and High Performance Computing*, 10(2-3), 182-198.

Kergosien, Y. L., Gotoda, H., & Kunii, T. L. (1994 January). Bending and Creasing Virtual Paper. *IEEE Computer Graphics and Applications*, 14(1), 40-48.

Kerr, J., Ratiu, P., & Sellberg, M. (1996). Volume Rendering of Visible Human Data for an Anatomical Virtual Environment. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 352-370). Washington, DC: IOS Press.

- Kesavadas, T., & Cannon, D. J. (1995). Virtual Tools that Carry Attributes for Interactivity Specifying Intermediate Manufacturing Processes. *Virtual Reality: Research, Development, and Applications*, 1(2), 71-90.
- Kessler, G. D., Hodges, L. F., & Walker, N. (1995). Evaluation of the CyberGlove as a Whole-Hand Input Device. *ACM Transactions on Computer-Human Interaction*, 2(4), 263-283.
- Kessler, G. D., & Hodges, L. F. (1996). A Network Communication Protocol for Distributed Virtual Environment Systems. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 214-222). : IEEE Computer Society Press.
- Kheddar, A., & Coiffet, P. (1995). Navigation in Virtual Environments: Head-Behavior Based Control Applications To VR Based Robotics. In Proceedings of the ROMAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 159-163). : IEEE.
- Kheddar, A., Chellali, R., & Coiffet, P. (1995). Implementation of Head-Behavior Based Control for Navigation within Virtual Reality Applications. In Proceedings of the IEEE International Conference on Systems, Man and Cybernetics: Intelligent Systems for the 21st Century, (pp. 4644-4649). : IEEE.
- Khonsari, L. S., & Fabri, P. J. (1996). Integrating Medical Informatics in to the Medical Undergraduate Curriculum. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 547-551). Washington, DC: IOS Press.
- Kijima, R., & Hirose, M. (1993). Virtual Sand Box: A Development of an Application of Virtual Environment for the Clinical Medicine. In Proceedings of the Third International Conference on Artificial Reality and Tele-Existence, ICAT '93, (pp. 41-54). : Japan Technology Transfer Association.
- Kijima, R., Shirakawa, K., Hirose, M., & Nihei, K. (1994 Winter). Virtual Sand Box: Development of an Application of Virtual Environment for Clinical Medicine. *Presence: Teleoperators and Virtual Environments*, 3(1), 45-59.
- Kijima, R., & Hirose, M. (1995). Fine Object Manipulation in Virtual Environment. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 42-58). New York, NY: SpringerWien.
- Kijima, R., & Hirose, M. (1996). Representative Spherical Plane Method and Composition of Object Manipulation Methods. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 195-204). : IEEE Computer Society Press.
- Kijima, R., & Ojika, T. (1997). Transition Between Virtual Environment and Workstation Environment with Projective Head Mounted Display. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 130-137). : IEEE Computer Society Press.
- Kikuchi, N. (1991 August). The RB 2 Virtual Reality System. *Journal of the Japan Society of Precision Engineering*, 57(8), 1347-1351.
- Kim, W. S., Hannaford, B., & Bejczy, A. J. (1992). Force-Reflection and Shared Compliant Control in Operating Telemanipulators with Time Delay. *IEEE Transactions on Robotics and Automation*, 8(2), 176-185.
- Kim, W. S., & Schenker, P. (1992). A Teleoperation Training Simulator with Visual and Kinesthetic Force Virtual Reality. In Proceedings of the Human Vision, Visual Processing and Digital Display III, (pp. 560-569). : SPIE.

- Kim, W. S. (1992). Developments of new force reflecting control schemes and an application to a teleoperation training simulator. In Proceedings of the 1992 IEEE International Conference on Robotics And Automation, (pp. 1412-1419). : IEEE Computer Society Press.
- Kim, W. S. (1993). Advanced Teleoperation, Graphic Aids, and Application to Time Delay Environments. In Proceedings of the IVR '93: Industrial Virtual Reality Show and Conference, (pp. 202-207). : Reed Exhibitions Japan, Ltd.
- Kim, J., Weidner, J., & Sacks, A. L. (1994). Using Virtual Reality for Science Mission Planning. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 37-46). : NASA Conference Publications.
- Kim, Y.-Y., Ko, H., & Choe, B.-H. (1994). Virtual Reality Infrastructure and its Application to Telerobotics. Computers and Graphics, 18(5), 667-673.
- Kim, W. S. (1996). Virtual Reality Calibration and Preview/Predictive Displays for Telerobotics. Presence: Teleoperators and Virtual Environments, 5(2), 173-190.
- Kim, D., Richards, S. W., & Caudell, T. P. (1997). An Optical Tracker for Augmented Reality and Wearable Computers. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 146-151). : IEEE Computer Society Press.
- Kimura, F. (1993). Virtual Manufacturing As A Basis For Concurrent Engineering. In Proceedings of the Conference Towards World Class Manufacturing, (pp. 103-117). : IFIP.
- King, W. J. (1993). Defining Phenomena for an Emotion State Model in the Human Interface. In Proceedings of the 2nd Annual IEEE International Workshop on Robot and Human Communication, RO-MAN '93, (pp. 182-187). : IEEE.
- King, D. (1993). Heads Up. Computer Graphics World, 16(11), 41-46.
- King, W. J., & Weghorst, S. J. (1995). Ear Tracking: Visualizing Auditory Localization Strategies. In Proceedings of the CHI '95: ACM Conference on Human Factors in Computing Systems, (pp. 214-215). : ACM.
- King, T. E., & McDowell, P. L. (1995). A Networked Virtual Environment for Shipboard Training. Unpublished Master's, Naval Postgraduate School, Monterey, California.
- King, W. J., & Ohya, J. (1996). The Representation of Agents: Anthropomorphism, Agency, and Intelligence. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 289). : ACM.
- Kinsey, S. B. (1994, July). Virtual Reality Drives a New Entertainment Market. The Red Herring(12), 34-38.
- Kirby, S. A. (1995). NPSNET: Software Requirements for Implementation of a Sand Table in the Virtual Environment. Unpublished Master's, Naval Postgraduate School, Monterey, California.
- Kirkby, K. C. (1996). Computer-assisted treatment of phobias. Psychiatric Services, 47(2), 139-140, 142.
- Kirsch, B., Schnepf, U., & Wachsmuth, I. (1993). Robots and Simulated Environment--First Steps Towards Virtual Robots. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 122-123). : IEEE Society Press.
- Kishino, F., Miyasato, T., & Terashima, N. (1995). Virtual Space Teleconferencing "Communication wth Realistic Sensations". In Proceedings of the RO-

MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 205-210). : IEEE.

Kitagawa, E., Yasuda, T., Yokoi, S., & Toriwaki, J. (1996 June). Implementation of Basic Functions of Interactive Surgical Simulation System Based on Virtual Space Manipulation. *Transactions of the Information Processing Society of Japan*, 37(6), 1088-1096.

Kitamura, Y., Takemura, H., Ahuja, N., & Kishino, F. (1993). Interface Detection Among Objects for Operator Assistance in Virtual Cooperative Workplace. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 442-448). : IEEE.

Kitamura, Y. (1995). A Sophisticated Manipulation Aid in a Virtual Environment. In Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing, (pp. 153-161). : ATR International.

Kitamura, Y., Smith, A., Takemura, H., & Kishino, F. (1995). Parallel Algorithms for Real-time Colliding Face Detection. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 211-218). : IEEE.

Kitamura, Y., Yee, A., & Kishino, F. (1996). Virtual Object Manipulation Using Dynamically Selected Constraints with Real-Time Collision Detection. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 173-181). : ACM.

Kiyama, M., & Fukuhara, Y. (1993). An Authoring System for Practice Environment in the Network Service Field. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 145-152). : NASA.

Kiyokawa, K., Takemura, H., Katayama, Y., Iwasa, H., & Yokoya, N. (1996). VLEGO: A Simple Two-handed Modeling Environment Based on Toy Blocks. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 27-34). : ACM.

Klein, S., & Dultz, W. (1990). Perfect 3-Dimensional Movies and Stereoscopic Movies on TV- and Projection Screens: an Appraisement. In Proceedings of the Stereoscopic Displays and Applications, (pp. 289-295). : SPIE.

Klein, S., & Dultz, W. (1992). Monocular Depth Cues in Conflict with the Stereoscopic Parallax on the Television Screen. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 142-145). : SPIE.

Kleiner, M., Dalenback, B.-I., & Svensson, P. (1993). Auralization-An Overview. *Journal of the Audio Engineering Society*, 41(11), 861-875.

Kleiner, M. (1994). Real Audio for Virtual Environments. *Virtual Reality Systems*, 1(3), 72-79.

Kleinwaks, J. M. (1994). Simulation and Training in Anesthesia. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 72). : SIG-Advanced Applications, Inc.

Kline, P. B., & Witmer, B. G. (1996). Distance Perception in Virtual Environments: Effects of Field of View and Surface Texture at Near Distances. In Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting, (pp. 1112-1116). : Human Factors and Ergonomics Society.

Kling-Petersen, T., & Rydmark, M. (1996). The Brain Project: An Interactive Learning Tool Using Desktop Virtual Reality on Personal Computers. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 529-538). Washington, DC: IOS Press.

Klos, T. U. S., Banks, S. A., Cook, F. F., Harman, M. K., & Banks, A. Z. (1995). Interactive Fluoroscopic Controlled Anterior Cruciate Ligament Reconstruction. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 173-174). Amsterdam: IOS Press.

Knapp, D., Kerr, J. P., & Sellberg, M. (1996). Patient Specific Color Texture Mapping of CT-based Anatomical Surface Models Using Cryosection Data. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 608-617). Washington, DC: IOS Press.

Knittel, G. (1993). VERVE - Voxel Engine for Real-Time Visualization and Examination. In *Proceedings of the Eurographics '93*, (pp. C:37-C:48). : North-Holland.

Knox, D., Schacht, C., & Turner, J. (1993). Virtual reality: A proposal for treating test anxiety in college students. *College Student Journal*, 27(3), 294-296.

Ko, H., Kim, J.-H., & Kim, J.-H. (1995). Searching for Facial Expression by Genetic Algorithm. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 87-98). New York, NY: SpringerWien.

Ko, H., & Badler, N. I. (1996). Animating Human Locomotion with Inverse Dynamics. *IEEE Computer Graphics and Applications*, 16(2), 50-59.

Ko, H., & Cremer, J. (1996). VRLOCO: Real-Time Human Locomotion from Positional Input Streams. *Presence: Teleoperators and Virtual Environments*, 5(4), 367-380.

Kobayashi, H., Nakamura, H., Tatsuno, J., & Iijima, S. (1993). Micro-Macro Tele-Manipulation System. In *Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication*, (pp. 165-170). : IEEE.

Kobayashi, M., & Siio, I. (1993). Virtual Conference Room: A Metaphor for Multi-User Real-Time Conferencing Systems. In *Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication*, (pp. 430-435). : IEEE.

Kobayashi, H., Ikeura, R., & Inooka, H. (1994). Evaluation for Maneuverability of a Control Stick using Electromyogram. In *Proceedings of the RO-MAN '94: 3rd IEEE International Workshop on Robot and Human Communication*, (pp. 78-83). : IEEE.

Kobayashi, H., Une, T., & Takahashi, S. (1994). An Autonomous Eye Robot for Teleoperation. In *Proceedings of the RO-MAN '94: 3rd IEEE International Workshop on Robot and Human Communication*, (pp. 323-326). : IEEE.

Kobayashi, H., Tatsuno, J., Ito, S., & Kuroda, A. (1994). Micro-Macro Manipulator with Haptic Interface-2nd Report: Control by using Virtual Model. In *Proceedings of the RO-MAN '94: 3rd IEEE International Workshop on Robot and Human Communication*, (pp. 130-133). : IEEE.

Kobayashi, M., Fujino, T., Kaneko, T., Chiyokura, H., Enomoto, K., Shiohata, K., Momose, Y., Kanabe, K., Shinozaki, K., & Fuku, N. (1995). Virtual Surgery for Fracture of the Mandible. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 175-179). Amsterdam: IOS Press.

- Kobayashi, M., & Schmandt, C. (1997). Dynamic Soundscape: mapping time to space for audio browsing. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 194-201). : ACM, Inc.
- Koch, R. (1993). Automatic Reconstruction of Buildings from Stereoscopic Image Sequences. In Proceedings of the Eurographics '93, (pp. C:339-C:350). : North-Holland.
- Koch, R. M., Gross, M. H., Carls, F. R., von Buren, D. F., Fankhauser, G., & Parish, Y. I. H. (1996). Simulating Facial Surgery Using Finite Element Methods. In Proceedings of the SIGGRAPH 96, (pp. 421-428). : ACM SIGGRAPH.
- Kochevar, P., & Wanger, L. (1995). The Tecate Data Space Exploration Utility. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 157-164). : ACM.
- Kocian, D. F., & Task, H. L. (1995). Visually Coupled Systems Hardware and the Human Interface. In T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 175-257). New York, NY: Oxford University Press.
- Koh, E. K. (1996). Wavevisions: A Desktop Virtual Reality Software. *Computers & Graphics*, 20(1), 69-75.
- Kohda, Y., & Sonobe, M. (1996). Cyberspace on the Web: Mirror Worlds of Real Cities. *Fujitsu Scientific and Technical Journal*, 32(2), 238-247.
- Koike, H. (1992). Three-Dimensional Software Visualization - A Framework and Its Applications. In Proceedings of the Proc of CG International 92, *Visual Computing*, (pp. 151-170). : Springer-Verlag.
- Koike, H. (1993 July). The Role of Another Spatial Dimension in Software Visualization. *ACM Transactions on Information Systems*, 11(3), 266-286.
- Kojima, K. (1989). Information Detective: a workstation for exploring three dimensional information space. *SIGCHI Bulletin*, 21(1), 78-9.
- Kolasinski, E. M., Goldberg, S. L., & Hiller, J. H. (1995). Simulator Sickness in Virtual Environments (Technical Report 1027--Army Project Number 2O262785A791): U.S. Army Research Institute, Simulator Systems Research Unit, Training Systems Research Division (published by U.S. Army Research Institute for the Behavioral and Social Sciences).
- Koller, D. R., Mine, M. R., & Hudson, S. E. (1996). Head-Tracked Orbital Viewing: An Interaction Technique for Immersive Virtual Environments. In Proceedings of the UIST '96: the Ninth Annual ACM Symposium on User Interface Software and Technology, (pp. 81-82). : ACM SIGGRAPH.
- Kollin, J. (1993). A Retinal Display for Virtual-Environment Applications. In Proceedings of the Society for Information Display, 1993 International Symposium, Digest of Technical Papers, (pp. 827). : Society for Information Display.
- Kollin, J. S., & Tidwell, M. (1995). Optical Engineering Challenges of the Virtual Retinal Display. In Proceedings of the Novel Optical Systems Design and Optimization, (pp. 48-60). : SPIE.
- Kollock, P. (1997). Design principles for online communities: Lessons from early settlements. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 152-153). : IEEE Computer Society Press.
- Konno, T., Mitani, J., Chiyokura, H., & Tanaka, I. (1996). Surgical Simulation of Facial Paralysis. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 488-497). Washington, DC: IOS Press.

- Kontarinis, D. A., & Howe, R. D. (1995). Tactile Display of Vibratory Information in Teleoperation and Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 4(4), 387-402.
- Kooper, R. (1994). Virtually Present: Treatment of Acrophobia by Using Virtual Reality Graded Exposure. Unpublished Master's Thesis, Netherlands: University of Delft.
- Kopf, M. (1992, September). Special Feature: Teaching about High Tech. *Tech Dimensions*, 52(2), 13-14.
- Kormos, D. W., Barnett, G. H., Kalfas, I. H., Piraino, D. W., & Steiner, C. P. (1994). Wandering Through the Body: Modern Computer-Assisted Surgery. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 109-112). : Aligned Management Associates.
- Kosaka, H., Serizawa, K., & Watanabe, K. (1993). A Universal Keyboard Switch for a Feeling Test. In *Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication*, (pp. 225-230). : IEEE.
- Kosta, C., & Krolak, P. D. (1993). Rapid Prototyping 3D Virtual World Interfaces within a Virtual Factory Environment. In *Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology*, (pp. 84-91). : NASA.
- Kosuge, K., Ito, T., & Fukuda, T. (1994). Semi-Autonomous Teleoperation System Using Virtual Tool. In *Proceedings of the RO-MAN '94: 3rd IEEE International Workshop on Robot and Human Communication*, (pp. 327-332). : IEEE.
- Kosuge, K., & Takeo, K. (1995). Manipulation of the Object in the Virtual and the Real Environment Using Reference Dynamics for the Task. In *Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication*, (pp. 36-41). : IEEE.
- Kotoku, T., & Tanie, K. (1993). A Force Display Algorithm for Virtual Environments. *Transactions of the Society of Instrument and Control Engineers*, 29(3), 347-355.
- Kovarik, M. (1993). Intelligent Computer Aided Training Systems in the Real World: Making the Technology Reachable for Everyday Educators. In *Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology*, (pp. 256-259). : NASA.
- Kovarik, V. J. (1993). Autonomously Acquiring Declarative and Procedural Domain Knowledge for ICAT Systems. In *Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology*, (pp. 408-414). : NASA.
- Kozak, J. J., Hancock, P. A., Arthur, E. J., & Chrysler, S. T. (1993). Transfer of training from virtual reality. *Ergonomics*, 36(7), 777-784.
- Kozian, D. F. (1988). Design Considerations for Virtual Panoramic Display (VPD). In *Proceedings of the Man-Machine Interface in Tactical Aircraft Design and Combat Automation*, (pp. 425). : AGARD.
- Kozlowski, D. M., Kuhlmann, J. L., Wilson, C., Little, C., Dickey, F. M., Kwok, K. S., Rogers, B., & Walsh, N. (1996). High Definition 3D Ultrasound Imaging. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 90-98). Washington, DC: IOS Press.

- Kozlowski, D. M., Morimoto, A. K., & Charles, S. T. (1996). Micro-Telerobotic Surgical System for Microsurgery. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 216-223). Washington, DC: IOS Press.
- Kozma, R. B. (1991). Learning with media. *Review of Educational Research*, 61, 179-211.
- Kozma, R. B. (1994). Will media influence learning? Reframing the debate. *Educational Technology Research and Development*(42), 7-19.
- Kramer, G. (1992). Sonification and Virtual Reality I: An Introduction. In *Proceedings of the Virtual Reality '92, VR Becomes a Business*, (pp. 85-89). : Meckler Publishing.
- Kramer, G. (1994). An Introduction to Auditory Display. In *Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces*, (pp. 1-77). : Addison-Wesley Publishing Company.
- Kramer, G. (1994). Some Organizing Principles for Representing Data with Sound. In *Proceedings of the ICAD Proceedings, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces*, (pp. 185-222). : Addison-Wesley Publishing Company.
- Krebber, W., & Gierlich, H. W. (1996). Auditory Feedback for Virtual Environment - An Application for Multi-processor. In *Proceedings of the FIVE '96: Framework for Immersive Working Environments*, the 2nd FIVE International Conference, (pp. 79-83). : Queen Mary & Westfield College.
- Krieg, J. C. (1993). Accuracy, Resolution, Latency and Speed; Key Factors in Virtual Reality Tracking Environment. In *Proceedings of the Virtual Reality '92, VR Becomes a Business*, (pp. 90-100). : Meckler Publishing.
- Krieg, J. C. (1993). Breakthrough in Human Motion Tracking Instrumentation. In *Proceedings of the IVR '93: Industrial Virtual Reality Show and Conference*, (pp. 38-46). : Reed Exhibitions Japan, Ltd.
- Krieg, J. C. (1993). Motion Tracking: Polhemus Technology. *Virtual Reality Systems*, 1(1), 32-36.
- Krieg, J. C. (1994). 3-D Tracking Technology in Medicine, Back to Basics. In *Proceedings of the Virtual Reality and Medicine: The Cutting Edge*, (pp. 29-31). : SIG-Advanced Applications, Inc.
- Kriete, A. (1989). Methodological Basis of Three-Dimensional Imaging and Visualization in Biomedical Sciences - a Review. In *Proceedings of the MedTech '89: Medical Imaging*, (pp. 2-13). : SPIE.
- Krueger, M. (1991). Virtual reality: a technology in nursing education's future [interview]. *Nursing Educators Microworld*, 5(3), 17, 19.
- Krueger, M. (1992). Simulation Versus Artificial Reality. In *Proceedings of the 1992 IMAGE Conference VI*, (pp. 147-155). : IMAGE Society.
- Krueger, M. W. (1992). An Architecture for Artificial Realities. In *Proceedings of the COMPCON 1992 Conference, Digest of Papers*, (pp. 462-465). : IEEE Computer Society Press.

Krueger, M. W. (1992). The Emperor's New Reality (Virtual Reality). In Proceedings of the Virtual Reality International 92, Impacts and Applications, (pp. 53-64). : Meckler Publishing.

Krueger, M. W. (1993). The Experience Society. *Presence: Teleoperators and Virtual Environments*, 2(2), 162-168.

Krueger, M. W. (1993). The Emperor's New Realities. *Virtual Reality World*, 1(3 and 4), 18-33.

Krueger, M. W. (1993 July). Environmental Technology: Making the Real World Virtual. *Communications of the ACM*, 36(7), 36-37.

Krueger, M. (1994). Voice Dancers. In Proceedings of the SIGGRAPH '94: Visual Proceedings, (pp. 188). : ACM SIGGRAPH.

Krueger, M. R. (1994). Olfactory Stimuli in Medical VR Applications. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 32-33). : SIG-Advanced Applications, Inc.

Krueger, M. W. (1994). There's More to Virtual Reality Than What You Wear [Abstract]. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 113). : Aligned Management Associates.

Krueger, W., & Froehlich, B. (1994). Responsive Workbench. In Proceedings of the Virtual Reality '94: Anwendungen und Trends, (pp. 73-80). : Springer-Verlag.

Krueger, M. W. (1995). Olfactory Stimuli in Virtual Reality for Medical Applications. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 180-181). Amsterdam: IOS Press.

Krueger, M. W. (1995). When, Why, and Whether to Experience Virtual Reality. In Proceedings of the Virtual Reality World '95, (pp. 477-478). : IDG Conferences and Seminars.

Krueger, W., Bohn, C. A., Froehlich, B., Schueth, H., Strauss, W., & Wesche, G. (1995). The Responsive Workbench: A Virtual Work Environment. *IEEE Computer*, 28(7), 42-48.

Krueger, M. (1995 January). Automating Virtual Reality. *IEEE Computer Graphics and Applications*, 15(1), 9-11.

Kuhlen, T., Kraiss, K.-F. S., A., Dohle, C., Hefter, H., & Freund, H.-J. (1996). Virtual Holography in Diagnosis and Therapy of Sensorimotor Disturbances. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 184-193). Washington, DC: IOS Press.

Kuhnnapfel, U. G. (1994). Real-time Graphical Computer Simulation for Endoscopic Surgery. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 114-1216). : Aligned Management Associates.

Kuhnnapfel, U. G., Krumm, H. G., Kuhn, C., & Hubner, M. (1995). Endosurgery Simulation with KISMET: A Flexible Tool for Surgical Instrument Design, Operation Room Planning and VR Technology based Abdominal Surgery Training. In Proceedings of the Virtual Reality World '95, (pp. 165-172). : IDG Conferences and Seminars.

Kumar, S., Manocha, D., & Lastra, A. (1995). Interactive Display of Large-Scale NURBS Models. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 51-58). : ACM.

Kumar, V. (1995). MBone: Interactive Multimedia on the Internet. Indianapolis, IN: New Riders Publishing.

Kunii, Y., Buss, M., & Hashimoto, H. (1993). Force Flow Between Human and Object in Virtual World. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 216-219). : IEEE.

Kunii, Y., & Hashimoto, H. (1994). Object Grasping in Virtual Environment Using Dynamic Force Simulator. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 261-264). : IEEE.

Kunii, Y., & Hashimoto, H. (1996). Dynamic Force Simulator for Multifinger Force Display. *IEEE Transactions on Industrial Electronics*, 43(1), 74-80.

Kunii, Y., & Hashimoto, H. (1996 June). Dynamic Force Simulator for Multi-DOF Haptic Interface. *Transactions of the Institute of Electrical Engineers of Japan, Part C*, 116-C(6), 706-712.

Kunt, M. (1993). An Overview of HDTV Systems. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 37-56). New York, NY: John Wiley and Sons.

Kuppersmith, R. B., Johnston, R., Jones, S. B., & Jenkins, H. A. (1996). Virtual reality surgical simulation and otolaryngology. *Archives of Otolaryngology*, 122(12), 1297-1298.

Kuppersmith, R. B., Johnston, R., Moreau, D., Loftin, R. B., & Jenkins, H. (1996). Building a Virtual Reality Temporal Bone Dissection Simulator. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 180-186). Washington, DC: IOS Press.

Kurmann, D., & Engeli, M. (1996). Modelling Virtual Space in Architecture. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 77-82). : ACM.

Kurze, M. (1997). Rendering Drawings for Interactive Haptic Perception. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 423-430). : ACM, Inc.

Kusaka, H. (1992). Apparent Depth and Size of Stereoscopically-Viewed Images. In Proceedings of the Human Vision, Visual Processing and Digital Display III, (pp. 476-482). : SPIE.

Kuschfeldt, S., Schulz, M., Ertl, T., Reuding, T., & Holzner, M. (1997). The Use of a Virtual Environment for FE Analysis of Vehicle Crash Worthiness [poster paper]. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 209). : IEEE Computer Society Press.

Kutulakos, K. N., & Vallino, J. (1996). Affine Object Representations for Calibration-Free Augmented Reality. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 25-36). : IEEE Computer Society Press.

Kyberd, P. J., Holland, O. E., Chappell, P. H., Smith, S., Tregidgo, R., Bagwell, P. J., & Snaith, M. (1995). MARCUS: a two degree of freedom hand prosthesis with hierarchical grip control. *IEEE Transactions on Rehabilitation Engineering*, 3(1), 70-76.

- La Grou, J., & Ciletti, E. (1994). Surround Sound Special Report: Studios Go Beyond Stereo. *EQ: The Project Recording and Sound Magazine*, 5(2), 56-62.
- Lackner, J. R. (1992). Multimodal and Motor Influences on Orientation: Implications for Adapting to Weightless and Virtual Environments. *Journal of Vestibular Research: Equilibrium and Orientation*, 2(4), 307-322.
- Lafortune, E. P., & Willems, Y. D. (1994 June). A Theoretical Framework for Physically Based Rendering. *Computer Graphics Forum*, 13(2), 97-107.
- Lamotte, W., Flerackers, E., Van Reeth, F., Earnshaw, R., & De Matos, J. M. (1997). Visinet: Collaborative 3D Visualization adn VR over ATM Networks. *IEEE Computer Graphics and Applications* [special issue: 3D and Multimedia on the Information Superhighway], 17(2), 66-75.
- Lampton, D. R., Bliss, J. P., & Knerr, B. W. (1993). Assessing Human Performance in Virtual Environments. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 270). : NASA.
- Lampton, D. R., Knerr, B. W., Goldberg, S. L., Bliss, J. P., Moshell, J. M., & Blau, B. S. (1994). The Virtual Environment Performance Assessment Battery (VEPAB): Development and Evaluation. *Presence: Teleoperators and Virtual Environments*, 3(2), 145-157.
- Lampton, D. R., Kolasinski, E. M., Knerr, B. W., Bliss, J. P., Bailey, J. H., & Witmer, B. G. (1994). Side-Effects and Aftereffects of Immersion in Virtual Environments. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 1154-1157). : Human Factors and Ergonomics Society.
- Lampton, D. R., McDonald, D. P., Singer, M. J., & Bliss, J. P. (1995). Distance Estimation in Virtual Environments. In Proceedings of the Human Factors and Ergonomics Society, (pp. 1268-1272). : Human Factors and Ergonomics Society.
- Lampton, D. R., Knerr, B. W., Goldberg, S. L., Bliss, J. P., Moshell, J. M., & Blau, B. S. (1995). The virtual environment performance assessment battery (VEPAB): Development and evaluation (AD A297 277): Springfield, VA: NTIS.
- Lamson, R. (1994). Virtual Therapy of Anxiety Disorders. *CyberEdge Journal*, 4(2), 1, 6-8.
- Lamson, R., & Meisner, M. (1994). The Effects of Virtual Reality Immersion in the Treatment of Anxiety, Panic and Phobia of Heights. In Proceedings of the Second Annual Conference on Virtual Reality and Persons with Disabilities, (pp. 63-68). : CSUN Center on Disabilities.
- Lamson, R. J., & Meisner, M. (1996). Clinical Application of Virtual Therapy to Psychiatric Disorders: Theory, Research, Practice. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 723-724). Washington, DC: IOS Press.
- Lang, L. (1993). Terrain Modeling. *Computer Graphics World*, 16(9), 22-28.
- Lanier, J. (1992). Virtual Reality: the Promise of the Future. *Interactive Learning International*, 8(4), 275-279.
- Lanier, J., & Biocca, F. (1992). An insider's view of the future of virtual reality. *Journal of Communication*, 42(4), 150-172.
- Lanier, J. (1993, Summer). Music From Inside Virtual Reality: The Sound of One Hand. *Whole Earth Review*(79), 30-35.

- Lantz, E. (1992). Virtual reality in science museums. *Instructional Delivery Systems*, 6(4), 10-12.
- Larijani, L. C. (1994). Homo Faber or Homo Sapiens? *Virtual Reality Special Report*, 1, 7-10.
- Larimer, J., Prevost, M., Ardit, A., Azueta, S., Bergen, J., & Lubin, J. (1991). Human Visual Performance Model for Crewstation Design. In *Proceedings of the Large-Screen-Projection, Avionic, and Helmet-Mounted Displays*, (pp. 196-210). : SPIE.
- Larson-Mogal, J. (1994). Bringing VR into the Mainstream. In *Proceedings of the Virtual Reality '94: Anwendungen und Trends*, (pp. 39-48). : Springer-Verlag.
- Larson-Mogal, J. (1995). Sharing the Vision: VR and Client Visualization of Architectural Designs. In *Proceedings of the Virtual Reality World '95*, (pp. 309-316). : IDG Conferences and Seminars.
- Larson-Mogal, J., & Pesce, M. (1996). Cosmo and VRML. *Iris Universe*, 36, 50-52.
- Lasko-Harvill, A. (1992). Interface Devices. In *Proceedings of the Virtual Worlds: Real Challenges--SRI's 1991 Conference on Virtual Reality*, (pp. 41-42). : Meckler Publishing.
- Lasko-Harvill, A. (1992 Spring). Identity and Mask in Virtual Reality. *Discourse: Theoretical Studies in Media and Culture*, 14(2), 203-221.
- Lasko-Harvill, A., Blanchard, C., Lanier, J., & McGrew, D. (1995). A Fully Immersive Cholecystectomy Simulation. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 182-186). Amsterdam: IOS Press.
- Lassig, P. H., & Molski, J.-U. (1996). Which Head Movements generate Cybersickness? - Simulation of the arbitrary horizontal eye and head movements during the use of the head-mounted display. In *Proceedings of the FIVE '96: Framework for Immersive Working Environments*, the 2nd FIVE International Conference, (pp. 137-145). : Queen Mary & Westfield College.
- Lastra, A. (1994). Technology for Virtual Reality. In *Proceedings of the ACM SIGGRAPH 1994*, (pp. 3:1-3:25). : ACM.
- Lastra, A., Molnar, S., Olano, M., & Wang, Y. (1995). Real-Time Programmable Shading. In *Proceedings of the 1995 Symposium on Interactive 3D Graphics*, (pp. 59-66). : ACM.
- Lateiner, J. S. (1994). Real-World Applications for Stereoscopic Volume Visualization and Manipulation. In *Proceedings of the Virtual Reality and Medicine: The Cutting Edge*, (pp. 108-109). : SIG-Advanced Applications, Inc.
- Lateiner, J. S. (1994). The Vox-L Stereoscopic Workstation: Stereoscopic Interactive Volume Visualization for Medical Data. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 117-120). : Aligned Management Associates.
- Latham, R. W. (1994 May). If VR is So Great, Why are VR Entertainment Systems So Poor? *Computer Graphics*, 28(2), 113-114.
- Latta, J. N. (1992). When Will Reality Meet the Marketplace? In *Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality*, (pp. 109-141). : Meckler.

Latta, J. N., & Oberg, D. J. (1994 January). A Conceptual Virtual Reality Model. *IEEE Computer Graphics and Applications*, 14(1), 23-29.

Lau, R. W. H., To, D. S. P., & Green, M. (1997). An Adaptive Multi-Resolution Modeling Technique Based on Viewing and Animation Parameters. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 20-29). : IEEE Computer Society Press.

Laurel, B., Strickland, R., & Tow, R. (1994 May). Placeholder: Landscape and Narrative in Virtual Environments. *Computer Graphics*, 28(2), 118-126.

Laurent, C. R., Ysebaert, D. K., Vanhoecke, E., & Van Hee, R. H. (1995). The use of a holographic projection system (HOPROS) in stereo endoscopic surgery and telesurgery: Advantages in comparison to shutter glasses and traditional head mounted displays. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 187-190). Amsterdam, Netherlands: IOS Press.

Laurent, C. R., Ornstein, M. H., Ysebaert, D. K., Veschave, J., & Van Hee, R. H. (1996). An Interactive Visual Man-Patient Interface for SemiImmersive Endoscopic Surgery. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 118-120). Washington, DC: IOS Press.

Lavagetto, F. (1995). Converting Speech into Lip Movements: A Multimedia Telephone for Hard of Hearing People. *IEEE Transactions on Rehabilitation Engineering*, 3(1), 90-102.

Le Van Gong, H., Soto, M., & Breant, F. (1994). Architecture For Virtual Environments Cooperation and Interoperability. In Proceedings of the 1994 IEEE International Conference on Systems, Man, and Cybernetics, Humans, Information and Technology, (pp. 1036-1041). : IEEE.

Lea, R., Jacquemot, C., & Pillevesse, E. (1993). COOL: System Support for Distributed Programming. *Communications of the ACM*, 36(9), 37-46.

Lea, J. T., Santos-Munne, J. J., & Peshkin, M. A. (1995). Diagramming Registration Connectivity and Structure. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 191-200). Amsterdam: IOS Press.

Lee, P., Bejczy, A., Schenker, P., & Hannaford, B. (1990). Telerobot Configuration Editor. In Proceedings of the 990 IEEE International Conference on Systems, Man and Cybernetics, (pp. 121-126). : IEEE.

Lee, T. Y. P., & Guest, C. C. (1993). Binocular Interaction Neural Network Model Using Parallel Channel Architecture. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 107-116). : SPIE.

Lee, S. (1993). Intelligent Sensing and Control for Advanced Teleoperation. *IEEE Control Systems Magazine*, 13(3), 19-28.

Lee, J., & Wohn, K. (1994). Fuzzy Aggregation of Motion Factors for Human Motion Generation. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 55-70). : World Scientific Publishing Co, Inc.

Lee, J., & Kunii, T. L. (1995 September). Model-based Analysis of Hand Posture. *IEEE Computer Graphics and Applications*, 15(5), 77-86.

Lee, C. A., Kesselman, C., & Schwab, S. (1996). Near-Real-Time Satellite Image Processing: Metacomputing in CC++. *IEEE Computer Graphics and Applications*, 16(4), 79-84.

- Lee, W. (1996). The fetal imaging workstation demonstration project. *Computerized Medical Imaging and Graphics*, 20(6), 459-466.
- Lee, J. S., Chee, Y., Kim, B., Lee, J. M., Park, K. S., Kwark, C., & Lee, M. C. (1996). Display of Coregistered Cross-Modality Images Using Time-Weighted Alternation Method. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 337-348). Washington, DC: IOS Press.
- Lehner, V. D., & DeFanti, T. A. (1997). Distributed Virtual Reality: Supporting Remote Collaboration in Vehicle Design. *IEEE Computer Graphics and Applications* [special issue: 3D and Multimedia on the Information Superhighway], 17(2), 13-17.
- Lehnert, H., & Blauert, J. (1991). Virtual Auditory Environment. In Proceedings of the 5th International Conference on Advanced Robotics, (pp. 211-216). : IEEE Computer Society Press.
- Lehnert, H., & Blauert, J. (1992). Principles of Binaural Room Simulation. *Applied Acoustics*, 36(3-4), 259-292.
- Lehnert, H. (1994). Fundamentals of Auditory Virtual Environments. In N. Magnenat & D. Thalmann (Eds.), *Artificial Life and Virtual Reality*, (pp. 161-172). Chichester: John Wiley & Sons.
- Lehnert, H., & Giron, F. (1995). Vocal Communication in Virtual Environments. In Proceedings of the Virtual Reality World '95, (pp. 279-294). : IDG Conferences and Seminars.
- Leibs, S. (1990, June 25). The Ultimate Interface [Virtual-Worlds Technology]. *InformationWeek*, 46-48.
- Leigh, J., & Johnson, A. E. (1995). A Multi-Perspective Approach to Collaborative Design in Persistent Networked Virtual Environments. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.
- Leigh, J., Vasilakis, C. A., DeFanti, T. A., Grossman, R., Assad, C., Rasnow, B., Protopappas, A., De Schutter, E., & Bower, J. M. (1995). Virtual Reality in Computational Neuroscience. In R. A. Earnshaw, J. A. Vince, & H. Jones (Eds.), (pp. 293-306). London, UK: Academic Press Ltd.
- Leigh, J., & Johnson, A. E. (1996). CALVIN: An Immersimedia Design Environment Utilizing Heterogeneous Perspectives. In Proceedings of the International Conference on Multimedia Computing and Systems, (pp. 20-23). : IEEE Computer Society Press.
- Leigh, J., & Johnson, A. E. (1996). Supporting Transcontinental Collaborative Work in Persistent Virtual Environments. *IEEE Computer Graphics and Applications*, 16(4), 47-51.
- Leinenwever, R., Best, L. G., & Erickson, B. J. (1992). Low-Cost Color LCD Helmet Display. In Proceedings of the Helmet-Mounted Displays III, (pp. 68-71). : SPIE.
- Lentz, F. C., III. (1995). Integration of ASW Helicopter Operations and Environment into NPSNET. Unpublished Masters, Naval Postgraduate School, Monterey, California.
- Lenzmann, B., & Wachsmuth, I. (1996). A User-Adaptive Interface Agency for Interaction with a Virtual Environment. In Proceedings of the Adaption and Learning in Multi-Agent Systems, IJCAI '95 Workshop, (pp. 140-151). : Springer-Verlag.

- Lenzmann, B. (1996). Interface Agents for Interacting with Virtual Environments. In Proceedings of the CHI '96: ACM Conference on Human Factors in Computing Systems, (pp. 51-52). : ACM.
- Leong, P., Tucker, T., & Carlile, S. (1996). Digital Signal Processing for the Auditory Scientist: A Tutorial Introduction. In S. Carlile (Ed.), *Virtual Auditory Space: Generations and Applications*, (pp. 79-108). New York, NY: Chapman & Hall.
- Leslie, J. (1993). MUDroom: Word-Based Virtual Reality Programs. *Atlantic*, 272(3), 28-33.
- Lester, J. C., Converse, S. A., Kahler, S. E., Barlow, S. T., Stone, B. A., & Bhogal, R. S. (1997). The Persona Effect: Affective Impact of Animated Pedagogical Agents. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 359-366). : ACM, Inc.
- Leston, J., Ring, K., & Kyral, E. (1996). *Virtual Reality: Business Application Markets and Opportunities*. London, UK: OVUM.
- LeVasseur, C. (1994). Virtual Reality On View in the Guggenheim Museum SoHo. *Virtual Reality World*, 2(1), 42-45.
- Levine, O. H., & Mourant, R. R. (1996). Effect of Visual Display Parameters on Driving Performance in a Virtual Environments Driving Simulator. In Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting, (pp. 1136-1140). : HFES.
- Levison, W. H., & Pew, R. W. (1993). Use of Virtual Environment Training Technology for Individual Combat Simulation (ADA2635464XSP): Cambridge, MA: BBN Systems and Technologies Corporation.
- Levit, C. (1992). The Virtual Windtunnel. In Proceedings of the 1992 IMAGE Conference VI, (pp. 137-140). : IMAGE Society.
- Levoy, M., & Whitaker, R. (1990). Gaze-directed Volume Rendering. *Computer Graphics [Proceedings of 1990 Symposium on Interactive 3D Graphics]*, 24(2), 217-223.
- LeWinter, R. (1993). The Objects of Your Desire. *Computer Graphics World*, 16(8), 54-60.
- Lewis, J. B., Koved, L., & Ling, D. (1991). Dialogue Structures for Virtual Worlds. In Proceedings of the CHI '91: Human Factors in Computing Systems, Reaching Through Technology, (pp. 131-136). : ACM.
- Lewis, J. B. (1992). The Realities of Building Virtual Realities. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 142-147). : Meckler.
- Lewis, S. (1995). Student-Created Virtual Tours. *Learning and Leading with Technology*, 23(2), 35-39.
- Li, L. C., Shelton, S., Cox, B., & Diftler, M. (1994). Coordinated Control of a Dual-Arm Dexterous Robot Using Full Immersion Telepresence and Virtual Reality. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 47-56). : NASA Conference Publications.
- Liang, J., Shaw, C., & Green, M. (1991). On Temporal-Spatial Realism in the Virtual Reality Environment. In Proceedings of the UIST Fourth Annual Symposium on User Interface Software and Technology, (pp. 19-25). : ACM.
- Liang, J. (1994). JDCAD: A Highly Interactive 3D Modeling System. *Computers and Graphics*, 18(4), 499-506.

- Liang, R.-H., & Ouhyoung, M. (1996). A Sign Language Recognition System Using Hidden Markov Model and Context Sensitive Search. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 59-66). : ACM.
- Lidwell, W., & Palumbo, D. (1993). Automating Knowledge Acquisition Processes: An Analysis of the Psychological and Technological Issues Surrounding the Automated Elicitation of Expert Knowledge. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 415-416). : NASA.
- Lieberman, D. A., & Brown, S. J. (1995). Designing interactive video games for children's health education. In Proceedings of the Interactive Technology and the New Paradigm for Healthcare, Medicine meets Virtual Reality III, (pp. 201-210). : IOS Press.
- Lieberman, H. (1997). Autonomous Interface Agents. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 67-74). : ACM, Inc.
- Liggett, K. K., Reising, J. M., Beam, D. J., & Hartsock, D. C. (1993). The Use of Aiding Techniques and Continuous Cursor Controllers to Designate Targets in 3D Space. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting Designing for Diversity, (pp. 11-15). : Human Factors Society.
- Linton, F., Bell, B., Bloom, C., & Norton, E. (1993). Tutoring Methods and Strategies in LEAP. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 305-314). : NASA.
- Lion, D. M. (1993). Three Dimensional Manual Tracking Using a Head-Tracked Stereoscopic Display. Unpublished Unpublished Master of Science thesis, Seattle, WA: College of Engineering, University of Washington.
- Lion, D., Rosenberg, C., & Barfield, W. (1993). Overlaying Three-Dimensional Computer Graphics with Stereoscopic Live Motion Video: Applications for Virtual Environments. In Proceedings of the Society for Information Display, 1993 International Symposium, Digest of Technical Papers, (pp. 483-486). : Society for Information Display.
- Lippit, A. M. (1994). Virtual Annihilation: Optics, VR, and the Discourse of Subjectivity. *Criticism*, 36(4), 595-610.
- Lippman, A. (1980). Movie-Maps: An Application of the Optical Videodisc to Computer Graphics. *Computer Graphics*, 56(3), 367-383.
- Lipscomb, J. S. (1989). Experience with Stereoscopic Display Devices and Output Algorithms. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 28-34). : SPIE.
- Lipton, L. (1989). Compatibility of Stereoscopic Video Systems with Broadcast Television Standards. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 95-101). : SPIE.
- Lipton, L. (1990). Large Screen Electro-Stereoscopic Displays. In Proceedings of the Large-Screen Projection Displays II, (pp. 108-113). : SPIE.
- Lipton, L. (1992). The Future of Autostereoscopic Electronic Displays. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 156-162). : SPIE.
- Lipton, L. (1993). Stereoscopic Real-Time and Multiplexed Video System. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 6-11). : SPIE.
- Lisle, C. (1992). Dynamic Terrain Databases on Networked Visual Simulators. In Proceedings of the 1992 IMAGE Conference VI, (pp. 99-114). : IMAGE Society.

- Little, G. R., Gustafson, S. C., & Nikolaou, V. E. (1994). Multiperspective Autostereoscopic Display. In Proceedings of the Cockpit Displays, (pp. 388-394). : SPIE.
- Littlefield, R. J., Heiland, R. W., & Macedonia, C. R. (1996). Virtual Reality Volumetric Display Techniques for Three-Dimensional Medical Ultrasound. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 498-510). Washington, DC: IOS Press.
- Liu, A., Tharp, G., & Stark, L. (1992). Depth Cue Interaction in Telepresence and Simulated Telemanipulation. In Proceedings of the Human Vision, Visual Processing and Digital Display III, (pp. 541-547). : SPIE.
- Liu, J., & Skerjanc, R. (1992). Construction of Intermediate Pictures for a Multiview 3D System. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 10-19). : SPIE.
- Liu, A., Tharp, G., French, L., Lai, S., & Stark, L. (1993). Some of What One Needs to Know About Using Head-Mounted Displays to Improve Teleoperator Performance. IEEE Transactions on Robotics and Automation, 9(5), 638-648.
- Liu, Y., Scudder, M., & Gimovsky, M. L. (1995). CAD Modeling of the Birth Process: A Preliminary Report. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 211-220). Amsterdam: IOS Press.
- Liu, A., & Pentland, A. P. (1996). Detection of Unexpected Motion While Driving: From Psychophysics to Real World via Virtual Environments. Presence: Teleoperators and Virtual Environments, 5(2), 163-172.
- Liu, Y., Scudder, M., & Gimovsky, M. L. (1996). CAD Modeling of the Birth Process: Part II. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 652-666). Washington, DC: IOS Press.
- Liu, W., & Li, J. (1996 July). Distributed LoD Algorithm for Complex Virtual Environments. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 21-25). : ACM.
- Lloyd, C. J. C., & Reinhart, W. F. (1993). Requirements for HUD Raster Image Modulation in Daylight. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting Designing for Diversity, (pp. 1335-1339). : Human Factors Society.
- Lloyd, C. J. C., & Reinhart, W. F. (1993). Insight: The Visual Performance Technical Group Newsletter [entire issue]. Insight: The Visual Performance Technical Group Newsletter, 15(3), 1-4.
- Lloyd, A., & Rees, R. (1994). Simple Demonstrations of Tele-Diagnostics and Tele-Presence/Robotics. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 88-91). : SIG-Advanced Applications, Inc.
- Lloyd, D., Benford, S. D., & Greenhalgh, C. M. (1996). DIS and Collaborative Virtual Environments,. In Proceedings of the Simulation in Industry - 8th European Simulation Symposium (ESS96), (pp. 74-78). : Society of Computer Simulation International.
- Locke, J. (1995). Applying Virtual Reality. IEEE Potentials, 14(4), 16-18.
- Loeffler, C. E. (1993). Networked Virtual Reality: Applications for Industry, Education and Entertainment. Virtual Reality World, 1(2), g-i.

- Loeffler, C. E. (1993). Distributed virtual reality: applications for education, entertainment and industry. *Telektronikk*, 89(4), 83-88.
- Loeffler, L. E., & Anerson, T. (Eds.). (1994). *The Virtual Reality Case Book*. New York, NY: Van Nostrand Rheinhold.
- Loftin, R. B., & Savelly, R. T. (1991). Advanced Training Systems for the Next Decade and Beyond. In Proceedings of the 1991 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. unpaginated). : NASA.
- Loftin, R. B., Engelberg, M., & Benedetti, R. (1993). Virtual Environments for Science Education: A Virtual Physics Laboratory. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 191-202). : NASA.
- Loftin, R. B., Engelberg, M., & Benedetti. (1993). Applying Virtual Reality in Education: A Prototypical Virtual Physics Laboratory. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 67-74). : IEEE Society Press.
- Loftin, R. B., Engelberg, M., & Benedetti, R. (1993). Virtual Controls for Interactive Environments: A Virtual Physics Laboratory. In Proceedings of the Society for Information Display, 1993 International Symposium, (pp. 823-826). : Society for Information Display.
- Loftin, R. (1993). Virtual Environment Technology for Aerospace Training. *Virtual Reality Systems*, 1(2), 36-38.
- Loftin, R. B., Engleberg, M., & Benedetti, R. (1993). Applying virtual reality in education: A prototypical virtual physics laboratory. In Proceedings of the IEEE 1993 Symposium on Research Frontiers in Virtual Reality (VRAIS), (pp. 67-74). : IEEE Computer Society Press.
- Loftin, R. B., Ota, D., Saito, T., & Voss, M. (1994). A Virtual Environment for Laparoscopic Surgical Training. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 121-123). : Aligned Management Associates.
- Loftin, R. B., Wang, L., Baffes, P., & Hua, G. (1994). General Architecture for Intelligent Computer-Aided Training, . USA.
- Loftin, R. B. (1994). Virtual environments for aerospace training. In Proceedings of the Wescon/94: Idea/Microelectronics, (pp. 384-387). : IEEE.
- Loftin, R. B. (1995). Virtual environments for aerospace training. In Proceedings of the Northcon/95: IEEE Technical Applications Conference and Workshops, (pp. 31-34). : IEEE.
- Loftin, R. B., & Kenney, P. (1995). Training the Hubble space telescope flight team. *IEEE Computer Graphics and Applications*, 15(5), 31-37.
- Loftin, R. B. (1996). Aerospace Applications of Virtual Environment Technology. *Computer Graphics* [Focus: "Real" Virtual Reality], 30(4), 33-36.
- Logan, C. W., Maida, J., Goldsby, M., Clark, J., Wu, L., & Prenger, H. (1993). Virtual Environment and Computer-Aided Technologies Used for System Prototyping and Requirements Development. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 361-389). : NASA.
- Logan, C. J., & East, M. (1993). Into the Void of Technology. *Axcess*, 1(11), 104-106.

- Lombardo, C. (1993). Hyper-NPSNET: Imbedded Multimedia in a Three-Dimensional Virtual World. Unpublished Unpublished Master's Thesis, Monterey, CA: Naval Postgraduate School.
- Long, M., Alexander, J. R., Downes-Martin, S., Morrison, J., Katz, W., & Short, E. (1992). Virtual Environment Debriefing Room for Naval Fighter Pilots: Phase I. In Proceedings of the Visual Data Interpretation, (pp. 49-60). : SPIE.
- Loomis, J. M. (1992). Distal Attribution and Presence. *Presence: Teleoperators and Virtual Environments*, 1(1), 113-119.
- Loomis, J. M. (1992). Presence and distal attribution: phenomenology, determinants, and assessment. In Proceedings of the Human Vision, Visual Processing and Digital Display III, (pp. 590-595). : SPIE.
- Loomis, J. M. (1993). Position Paper: Understanding Synthetic Experience Must Begin with the Analysis. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 54-57). : IEEE Society Press.
- Loper, M. L., & Petty, M. D. (1995). Distributed interactive simulation and emergency management. In Proceedings of the 1995 Simulation MultiConference: Simulators International XII, (pp. 344-348). : SCS.
- Lorensen, W. E., Cline, H., Naftis, C., Kikinis, R., Altobelli, D., Gleason, L., & Jolesz, F. (1994). Enhancing Reality in the Operating Room. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 124-127). : Aligned Management Associates.
- Lorensen, W. E., Jolesz, F. A., & Kikinis, R. (1995). The Exploration of Cross-Sectional Data with a Virtual Endoscope. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 221-230). Amsterdam: IOS Press.
- Lou, Y., Lopez, F. J. P., & Pipaon, J. J. V. (1992). An Automatic Rotoscopy System for Human Motion Based on a Biomechanic Graphical Model. *Computers and Graphics*, 16(4), 355-362.
- Lowe, R. (1994). Three Case Studies in VR Systems. *Virtual Reality [Special Report]*, 1, 77-79.
- Lowe, R. (1994). Three UK Case Studies in Virtual Reality. *Virtual Reality World*, 2(2), 51-54.
- Lowther, K., & Ware, C. (1996). Vection with Large Screen 3D Imagery. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 233-234). : ACM.
- Lucas, T. (1994, June). Advances in Helmet-Mounted Displays. *Avionics*, 20-27.
- Lucente, M. (1993). Interactive Computation of Holograms using a Look-Up Table. *Journal of Electronic Imaging*, 2(1), 28-34.
- Lucente, M., & Galyean, T. A. (1995). Rendering Interactive Holographic Images. In Proceedings of the SIGGRAPH 95, (pp. 387-394). : ACM.
- Luebke, D., & Georges, C. (1995). Portals and Mirrors: Simple, Fast Evaluations of Potentially Visible Sets. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 105-106). : ACM.
- Luecke, G. R., & Chai, Y.-H. (1997). Contact Sensation in the Synthetic Environment Using the ISU Force Reflecting Exoskeleton. In Proceedings of the IEEE

1997 Virtual Reality Annual International Symposium, (pp. 192-198). : IEEE Computer Society Press.

Lumsden, C. J. (1995). CELLSIM: Virtual Cells for Research and Molecular Therapy Design. *Journal of Medicine and Virtual Reality*, 1(1), 6-10.

Lurins, S. L. (1993). Virtual Reality in the Real World. *CADalyst*, 10(8), 37-58.

Lusted, H. S., Knapp, R. B., & Lloyd, A. (1992). Biosignal Processing in Virtual Reality. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 101-103). : Meckler Publishing.

Lusted, H. S., Knapp , R. B., & M., L. A. (1993). Applications For Biosignal Processing In Virtual Reality. In Proceedings of the VR'93, Virtual Reality International 93: the Third Annual Conference on Virtual Reality, (pp. 134-137). : Meckler.

Lusted, H. S., Knapp, R. B., & Lloyd, A. (1993). Biosignal Processing and Biocontrollers. *Virtual Reality Systems*, 1(1), 38-39.

Lusted, H. S., Knapp, R. B., & Lloyd, A. M. (1993, September). Biocontrollers for Virtual Environments. *AI Expert [Virtual Reality '93: Fall Special Report]*, 47-49.

Lusted, H. S., & Knapp, R. B. (1994). Medical Applications for Biocontroller Technology. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 131-133). : Aligned Management Associates.

Luttmann, D. R., Jones, D. B., & Soper, N. J. (1996). Teleproctoring Laparoscopic Operations with Off-the-Shelf Technology. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 313-318). Washington, DC: IOS Press.

Lynch, M. B., & Dagli, C. H. (1992). Backpropagation Neural Network for Stereoscopic Vision Calibration. In Proceedings of the Machine Vision Architectures, Integration and Applications, (pp. 289-298). : SPIE.

Ma, J., Hollerbach, J. M., & Hunter, I. W. (1993). Optical Design for a Head Mounted Display. *Presence: Teleoperators and Virtual Environments*, 2(3), 185-202.

MacDonald, L., & Vince, J. (1994). *Interacting with Virtual Environments*. New York, NY: John Wiley & Sons.

Macedonia, M. R., Zyda, M. J., Pratt, D. R., Barham, P. T., & Zeswitz, S. (1994). NPSNET: A Network Software Architecture for Large Scale Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 3(4), 265-287.

Macedonia, M. R., & Brutzman, D. P. (1994). MBone Provides Audio and Video Across the Internet. *Computer*, 27(4), 30-36.

Macedonia, M. R., Brutzman, D. P., Zyda, M. J., Pratt, D. R., Barham, P. T., Falby, J., & Locke, J. (1995). NPSNET: A Multi-Player 3D Virtual Environment over the Internet. In Proceedings of the 1995 ACM Symposium on Interactive 3D Graphics, (pp. 93-94). : ACM.

Macedonia, M. R., Zyda, M. J., Pratt, D. R., Brutzman, D. P., & Barham, P. T. (1995). Exploiting Reality with Multicast Groups: A Network Architecture for Large-Scale Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 2-10). : IEEE Computer Society Press.

Macedonia, M. R. (1995). Network Software Architecture for Large Scale Virtual Environments. Unpublished Doctoral, Naval Postgraduate School.

Macedonia, M. R., Zyda, M. J., Pratt, D. R., Brutzman, D. P., & Barham, P. T. (1995 September). Exploiting Reality with Multicast Groups. *IEEE Computer Graphics and Applications*, 15(5), 38-45.

Macedonia, M. R., & Zyda, M. J. (1997 Jan-Mar). A Taxonomy for Networked Virtual Environments. *IEEE Multimedia*, 4(1), 48-56.

Machlis, M. A., & Alexander, H. L. (1991). Investigation of Visual Interface Issues in Space Teleoperation Using a Virtual Teleoperator. In Proceedings of the AIAA Flight Simulation Technologies Conference, (pp. 330-336). : American Institute of Aeronautics and Astronautics.

Machlis, S. L. (1992). Computers Create a New Reality. *Design News*, 48(20), 60-70.

Machover, C. (1993). Virtual Reality and Multimedia in Engineering and Science. In Proceedings of the 14th Annual National Computer Graphics Association, NCGA '93, Computer Graphics Solutions: Applications for Implementation, (pp. 435-475). : NCGA.

Machover, C., & Tice, S. E. (1994 January). Virtual Reality. *IEEE Computer Graphics and Applications*, 14(1), 15-16.

Maciel, P. W. C., & Shirley, P. (1995). Visual Navigation of Large Environments Using Textured Clusters. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 95-102). : ACM.

MacIntyre, B., & Feiner, S. (1996). Language-Level Support for Exploratory Programming of Distributed Virtual Environments. In Proceedings of the UIST '96: the Ninth Annual ACM Symposium on User Interface Software and Technology, (pp. 83-94). : ACM SIGGRAPH.

MacKenzie, I. S. (1995). Input Devices and Interaction Techniques for Advanced Computing. In T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 437-472). New York, NY: Oxford University Press.

Mackey, R. L. (1991). NPSNET: Hierarchical Data Structures for Real-Time Three-Dimensional Visual Simulation. Unpublished Master's Thesis, Monterey, CA: Naval Postgraduate School.

Mackinlay, J. D., Robertson, G. G., & DeLine, R. (1994). Developing Calendar Visualizers for the Information Visualizer. In Proceedings of the UIST'94: Proceedings of the ACM Symposium on User Interface Software and Technology, (pp. 109-118). : ACM.

MacLoed, D. (1993). Output Devices: Used by Architects. *Progressive Architecture*, 74(10), 86-88.

MacRae, A. C. (1994). The Virtual Globe Theater. *Virtual Reality World*, 2(5), 40-43.

Macura, K. J., Macura, R. T., Toro, V. E., Binet, E. F., & Trueblood, J. H. (1993). Case-Based Teaching System for Radiology. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 252-255). : NASA.

Maddocks, J. A. (1994). Multi-Trax Motion Capture Systems for Real Time Location of Medical and Surgical Instruments in Interactive Training Environments. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 195-196). : SIG-Advanced Applications, Inc.

Madhyastha, T. M., & Reed, D. A. (1994). A Framework for Sonification Design. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 267-290). : Addison-Wesley Publishing Company.

Madritsch, F. (1995). Correct Spatial Visualisation Using Optical Tracking. Virtual Reality: Research, Development, and Applications, 1(2), 122-126.

Madritsch, F., & Gervautz, M. (1996). CCD-Camera Based Optical Beacon Tracking for Virtual and Augmented Reality. Computer Graphics Forum, 15(3), C207-C216.

Madritsch, F., Leberl, F., & Gervautz, M. (1996). Camera Based Beacon Tracking: Accuracy and Applications. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 101-108). : ACM.

Maeda, T., Ohyama, E., & Tachi, S. (1991). Reality on Binocular Head Mounted Display. , 91(HC91-2), 33-38.

Maggioni, C. (1993). A Novel Gestural Input Device for Virtual Reality. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 118-124). : IEEE Service Center.

Maggioni, C. (1994). Non Immersive Control of Virtual Environments. In Proceedings of the Virtual Reality '94: Anwendungen und Trends, (pp. 127-144). : Springer-Verlag.

Magnenat, N., & Thalmann, D. (Eds.). (1994). Artificial Life and Virtual Reality. Chichester: John Wiley & Sons.

Magnenat-Thalmann, N., & Thalmann, D. (1993). The World of Virtual Actors. In N. M. Thalmann & D. Thalmann (Eds.), Virtual Worlds and Multimedia, (pp. 113-126). New York, NY: John Wiley and Sons.

Magnenat-Thalmann, N., Carion, S., Courchesne, M., Volino, P., & Yin, W. (1996). Virtual Clothes, Hair and Skin for Beautiful Top Models. In Proceedings of the Computer Graphics International, (pp. 132-141). : IEEE Computer Society Press.

Magnenat-Thalmann, N., & Thalmann, D. (1996 March). Computer Animation. ACM Computing Surveys, 28(1), 161-164.

Mahal, B. S., Clark, D. E. R., & Simmons, J. E. L. (1996). Software Advances in Virtual Environments: A Survey. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 67-69). : Queen Mary & Westfield College.

Maher, K. (1993, July). Developing a Market for Virtual Reality. AI Expert [Virtual Reality 93 Special Report], 63-72.

Maher, K. (1994). The Lenny Lipton Story. Virtual Reality Special Report, 1(4), 25-32.

Maher, S., & Cohen, J. (1996). Virtual Reality at NASA/Goddard Space Flight Center. Computer Graphics [Focus: "Real" Virtual Reality], 30(4), 49-50.

Mahoney, D. P. (1993). A Virtual Reality Link into Cable TV, Tech Watch. Computer Graphics World, 16(10), 12.

Mahoney, D. P. (1993). Time Travels. Computer Graphics World, 16(10), 38-42.

Mahoney, D. P. (1995). Modeling for Virtual Reality. Computer Graphics World, 18(10), 45-50.

- Mahoney, D. P. (1995, May). Driving VR. *Computer Graphics World*, 22-33.
- Mahoney, D. P. (1996). Virtual Reality on the PC. *Computer Graphics World*, 19(5), 53-60.
- Maion, R., Niebuhr, B. R., Renten, B. C., & Bernstein, J. (1993). An Idealized Computer-Based Patient Record for Teaching Medical Diagnosis and Care Planning. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 244-251). : NASA.
- Mandeville, J., Davidson, J., Campbell, D., Dahl, A., Schwartz, P., & Furness, T. (1996). A Shared Virtual Environment for Architectural Design Review. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Manetta, C., & Blade, R. (1995). Glossary of Virtual Reality Terminology. *The International Journal of Virtual Reality: A Multimedia Publication for Professionals*, 1(2), 35-39.
- Maney, T., & Hamburger, H. (1993). VIS/ACT: The Next Episode. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 338-343). : NASA.
- Mangiaracina, S., & Maioli, C. (1995). Building hypermedia for learning: a framework based on the design of user interface. In Proceedings of the Symbiosis of Human and Artifact: the Sixth International Conference on Human-Computer Interactions (HCI International'95), (pp. 857-862). : Elsevier.
- Manhart, P. K., Malcolm, R. J., & Fazee, J. G. (1993). Augeye - A Compact, Solid Schmidt Optical Relay for Helmet Mounted Displays. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 234-245). : IEEE Service Center.
- Mann, R. (1993). Virtual Reality in Biomedical and Rehabilitation Engineering. In Proceedings of the IVR '93: Industrial Virtual Reality Show and Conference, (pp. 24-29). : Reed Exhibitions Japan, Ltd.
- Manning, T. R. (1995). The Emotional Dimension of Experience in Information Environments. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 231-236). Amsterdam: IOS Press.
- Mantovani, G. (1995). Virtual reality as a communication environment: Consensual hallucination, fiction, and possible selves. *Human Relations*, 48(6), 669-683.
- Mapes, D. (1994). The "Toy Scout" Arcade. In Proceedings of the SIGGRAPH '94: Visual Proceedings, (pp. 162-163). : ACM SIGGRAPH.
- Mapes, D. P., & Moshell, J. M. (1995). A Two-Handed Interface for Object Manipulation in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 4(4), 4043-416.
- Maples, C. (1995 Winter). μuSE (Multidimensional, User-Oriented Synthetic Environment), A Functionally Based, Human-Computer Interface. *The International Journal of Virtual Reality*, 1(1), 2-8.
- Marbot, P. H., & Hannaford, B. (1991). Mini Direct Drive Robot Arm for Biomedical Application. In Proceedings of the ICAR '91: Fifth International Conference on Advanced Robotics, Robots in Unstructured Environments, (pp. 859-864). : IEEE.

- Marcus, B. A., Lucas, W., & Churchill, P. J. (1989). Human Hand Sensing for Robotics and Teleoperations. *Sensors*, 6(11), 26, 28-31.
- Marcus, B. A., & Sturman, D. J. (1991). Exotic Input Devices. In Proceedings of the National Computer Graphics Association, NCGA '91, (pp. 293-299). : NCGA.
- Marcus, S. (1992). Virtual Realities: From the Concrete to the Barely Imaginable. In Proceedings of the Virtual Reality and Persons with Disabilities, (pp. 31-35). : CSUN Office of Disabled Student Services.
- Marcus, B. A. (1992, April). Feedback Devices: The Human Machine Connection. *Byte*, 148-149.
- Marcus, S. (1992, May/June). Reading and Writing: Virtually Yours. *Electronic Learning Special Edition*, 11(8), 26.
- Marcus, B. (1994). Touch Feedback in Surgery. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 96-97). : SIG-Advanced Applications, Inc.
- Marcus, B. A. (1994). Hands On: Haptic Feedback in Surgical Simulation. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 134-139). : Aligned Management Associates.
- Marhl, M., Guid, N., Oblonsek, C., & Horvat, M. (1996). Extensions of sweep surface constructions. *Computers and Graphics*, 20(6), 893-903.
- Mariani, J. A., & Louher, R. (1992). TripleSpace: An Experiment in a 3d Graphical Interface to a Binary Relational Database. *Interacting With Computers*, 4(2), 147-162.
- Mariani, D. (1995). Crewman's Associate Advanced Technology Demonstration. In Proceedings of the Cockpit Displays II, (pp. 14-17). : SPIE.
- Mark, W. R., Randolph, S. C., Finch, M., Van Verth, J. M., & Taylor, R. M. I. (1996). Adding Force Feedback to Graphics Systems: Issues and Solutions. In Proceedings of the SIGGRAPH 96, (pp. 447-452). : ACM SIGGRAPH.
- Marquardt, M. J. (1996). Cyberlearning: New Possibilities for HRD. *Training and Development*, 50(11), 56-57.
- Marsa, L. (1995). Shoptalk in Cyberspace: Virtual Laboratories Encourage Collaboration and Exchange. *Omni*, 17(6), 14.
- Marshall, J. (1993). The Medium is the Mission. *WIRED*, 1(5), 68-71.
- Martens, W. L., McRuer, R., Childs, C. T., & Viirre, E. (1996). Physiological Approach to Optimal Stereographic Game Programming: A Technical Guide. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 261-270). : SPIE.
- Martin, S. W., & Hutchinson, R. C. (1989). Low Cost Design Alternatives for Head Mounted Stereoscopic Displays. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 53-58). : SPIE.
- Martin-Emerson, R., & Wickens, C. (1992). The Vertical Visual Field and Implications for the Head-Up Display. In Proceedings of the Human Factors Society 36th Annual Meeting, (pp. 1408-1412). : Human Factors Society.
- Martinez, R., & Chimiak, W. J. (1994). Remote Consultation and Diagnosis Via the Global Medical Informatic Consortium Networks. In Proceedings of the Medicine

Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 140-143). : Aligned Management Associates.

Massey, L. D., Kurland, L. C., McDonald, S. P., & Wex, W. (1993). A distributed virtual environment for instructor-based tactical team training. In Proceedings of the 1993 Summer Computer Simulation Conference, (pp. 904-909). : SCS.

Massimino, M. J., Sheridan, T. B., & Roseborough, J. B. (1989). One Handed Tracking in Six Degrees of Freedom. In Proceedings of the 1989 IEEE International Conference on Systems, Man and Cybernetics, (pp. 498-503). : IEEE.

Massimino, M., & Sheridan, T. (1993). Using Auditory and Tactile Displays for Force Feedback. In Proceedings of the Telemanipulator Technology, (pp. 325-336). : SPIE.

Massimino, M. J., & Sheridan, T. B. (1993). Sensory Substitution for Force Feedback in Teleoperation. *Presence: Teleoperators and Virtual Environments*, 2(4), 344-352.

Massimino, M. J., & Sheridan, T. B. (1994 March). Teleoperator Performance with Varying Force and Visual Feedback. *Human Factors*, 36(1), 145-157.

Mastaglio, T. W., & Williamson, J. (1995). User-centered development of a large-scale complex networked virtual environment. In Proceedings of the CHI'95: Human Factors in Computing Systems, (pp. 546-552). : ACM.

Mastaglio, T. W., & Callahan, R. (1995). A large-scale complex virtual environment for team training. *Computer*, 28(7), 49-56.

Masterman, H. C., & Vernon, H. (1993). Software Requirements for Virtual-Environment Applications. In Proceedings of the Society for Information Display, 1993 International Symposium, (pp. 819-822). : Society for Information Display.

Matsubara, Y., Toihara, S., Tsukinari, Y., & Nagamachi, M. (1997). Virtual learning environment for discovery learning and its application on operator training. *IEICE Transactions on Information and Systems*, E80-D(2), 176-188.

Mattheus, R. (1994). The Information Highway: European Efforts Towards a Multi-Media Healthcare Infrastructure. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 144-149). : Aligned Management Associates.

Mattheus, R. (1995). Global Information Society: Interaction with Information. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 423+). Amsterdam: IOS Press.

Mattoon, J. S., & Klein, J. D. (1993). Controlling challenge in instructional simulation. *Journal of Educational Computing Research*, 9(2), 219-235.

Mattoon, J. S. (1996). Modeling and simulation: a rationale for implementing new training technologies. *Educational Technology*, 36(4), 17-26.

Maurel, W., Thalmann, D., Hoffmeyer, P., Beylot, P., Gingins, P., Kalra, P., & Magnenat Thalmann, N. (1996). A Biomechanical Musculoskeletal Model of Human Upper Limb for Dynamic Simulation. In Proceedings of the 7th Eurographics International Workshop on Computer Animation and Simulation '96, (pp. 121-136). : SpringerWein.

Maurer, H. (1993). An Overview of Hypermedia and Multimedia Systems. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 1-12). New York, NY: John Wiley and Sons.

- Maurer, W. (1996). Now That's Entertainment. *Iris Universe*(36), 46-49.
- Max, M. L., & Burke, J. C. (1996). Virtual Reality for Autism Communication and Education, with Lessons for Medical Training Simulators. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 46-53). Washington, DC: IOS Press.
- Max, M. L., & Gonzalez, J. R. (1996). Blind Persons Navigate in Virtual Reality (VR); Hearing and Feeling Communicates "Reality". In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 54-59). Washington, DC: IOS Press.
- Maxfield, J., Fernando, T., & Dew, P. (1995). A Distributed Virtual Environment for Concurrent Engineering. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 162-171). : IEEE Computer Society Press.
- Mayer-Kress, G., Bargar, R., & Choi, I. (1994). Musical Structures in Data from Chaotic Attractors. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 341-368). : Addison-Wesley Publishing Company.
- McAllister, D. F. (1992). On Minimizing Absolute Parallax in a Stereo Image. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 20-30). : SPIE.
- McAllister, D. F. (Ed.). (1993). *Stereo Computer Graphics and Other True 3D Technologies*. Princeton, NJ: Princeton University Press.
- McBride, J. A., & McMullen, J. F. (1996). Using virtual reality for distance teaching a graduate information systems course. In Proceedings of the Twenty-Ninth Hawaii International Conference on System Sciences, (pp. 263-272). : IEEE Computer Society Press.
- McCabe, K., & Rangwalla, A. (1994). Auditory Display of Computational Fluid Dynamics Data. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 327-340). : Addison-Wesley Publishing Company.
- McCabe, J. D. (1995). Long-Haul Communications Support for Visualization of Computational Aerospace Simulations. *Presence: Teleoperators and Virtual Environments*, 4(2), 110-120.
- McCann, R. S., Lynch, J. M., Foyle, D. C., & Johnston, J. C. (1993). Modeling Attentional Effects with Head-Up Displays. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting, Designing for Diversity, (pp. 1345-1349). : Human Factors Society.
- McCarthy, L., Pontecorvo, M., Grant, F., & Stiles, R. (1993). Spatial Considerations for Instructional Development in a Virtual Environment. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 180-189). : NASA.
- McCartney, D. J., Sheat, D. E., Chamberlin, G. R., & Travis, D. S. (1993). Telecommunications Applications for 3D Imaging Systems. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 29-35). : SPIE.
- McCarty, W. D., Sheasby, S., Amburn, P., Stytz, M. R., & Switzer, C. (1994 January). A Virtual Cockpit for a Distributed Interactive Simulation. *IEEE Computer Graphics and Applications*, 14(1), 49-54.

McCauley, M. E., & Sharkey, T. J. (1991). Spatial Orientation and Dynamics in Virtual Reality Systems: Lessons From Flight Simulation. In Proceedings of the Human Factors Society, 35th Annual Meeting, (pp. 1348-1352). : Human Factors Society Inc.

McCauley, M. E., & Sharkey, T. J. (1992). Cybersickness: Perception of Self-Motion in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 1(3), 311-318.

McCluskey, J. (1991). Virtual Reality: The "Fifth?" Dimension. *Multimedia Review*, 2(1), 3-6.

McCluskey, J. (1992). A Primer on Virtual Reality. *T.H.E. Journal*, 20, 56-57.

McCluskey, J. (1993, September/October). Educational Applications of Virtual Reality: Medium or Myth? *Syllabus*, 29, 10.

McCracken, T., & Spurgeon, T. L. (1991). The Vesalius Project: Interactive Computers in Anatomical Instruction. *Journal of Biocommunications*, 18(2), 40-44.

McDonald, J. S., Rosenberg, L. B., & Stredney, D. (1995). Virtual reality technology applied to anesthesiology. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare, Medicine meets Virtual Reality III*, (pp. 237-243). Amsterdam, Netherlands: IOS Press.

McDonald, J. S., Yagel, R., Schmalbrock, P., Stredney, D., Reed, D. M., & Sessanna, D. (1996). Visualization of Compression Neuropathies through Volume Deformation. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 99-106). Washington, DC: IOS Press.

McDonough, J. (1992). Doorways to the Virtual Battlefield. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 104-114). : Meckler Publishing.

McDowall, I. E., Bolas, M., Pieper, S., & Fisher, S. S. (1990). Implementation and Integration of a Counterbalanced CRT-Based Stereoscopic Display for Interactive Viewpoint Control in Virtual Environment Applications. In Proceedings of the Stereoscopic Displays and Applications, (pp. 136-146). : SPIE.

McDowall, I. (1994). 3D Stereoscopic Data for Immersive Displays. *AI Expert*, 9(5), 18-21.

McGinnis, M. L., & Phelan, R. G. (1996). A hybrid expert system for scheduling the U.S. Army's Close Combat Tactical Trainer (CCTT). *Expert Systems with Applications*, 11(2), 157-176.

McGovern, K. T., & McGovern, L. T. (1994). The Virtual Clinic: A Virtual Reality Surgical Simulator. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 150-157). : Aligned Management Associates.

McGovern, K. (1994). The Virtual Heart. *Virtual Reality Systems*, 1(3), 46-47.

McGovern, K. T., & McGovern, L. T. (1994). Virtual Clinic: A Virtual Reality Surgical Simulator. *Virtual Reality World*, 2(2), 41-44.

McGovern, K., & Johnston, R. (1996). The Role of Computer-Based Simulation for Training Surgeons. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 342-345). Washington, DC: IOS Press.

- McGovern, K. (1996). Computer-Based Training for Surgeons: Evolution or Revolution? In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 502-507). Washington, DC: IOS Press.
- McGreevy, M. W. (1992). The Presence of Field Geologists in Mars-like Terrain. Presence: Teleoperators and Virtual Environments, 1(4), 375-403.
- McGuinness, B., & Meech, J. F. (1992). Human Factors in Virtual Worlds. 1. Information Structure and Representation. In Proceedings of the IEE Colloquium on 'Using Virtual Worlds', (pp. 3/1-3). : IEE.
- McKeitham, C. M. (1993). Integrated Intelligent Training and Job Aiding for Combustion Turbine Engines. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 153-160). : NASA.
- McKenna, M., Pieper, S., & Zeltzer, D. (1990 March). Control of a Virtual Actor: The Roach. Computer Graphics [Proceedings of 1990 Symposium on Interactive 3-D Graphics], 24(2), 165-174.
- McKenna, M. (1992). Interactive Viewpoint Control and Three-Dimensional Operations. In Proceedings of the 1992 Symposium on Interactive 3D Graphics, (pp. 53-56). : ACM.
- McKenna, M., & Zeltzer, D. (1992). Three Dimensional Visual Display Systems for Virtual Environments. Presence: Teleoperators and Virtual Environments, 1(4), 421-458.
- McKenna, M., & Zeltzer, D. (1996). Dynamic Simulation of a Complex Human Figure Model with Low Level Behavior Control. Presence: Teleoperators and Virtual Environments, 5(4), 431-456.
- McKeown, S. (1992, November 6). Learning Through a Looking-Glass Universe. Times Educational Supplement(3984), U13.
- McLellan, H. (1991). Virtual Environments and Situated Learning. Multimedia Review, 2(3), 25-37.
- McLellan, H. (1992). Virtual Reality: A Selected Bibliography. (Vol. 6). Englewood Cliffs, NJ: Educational Technology Publications.
- McLellan, H. (1993). Virtual Reality: Case Studies in Design for Collaboration and Learning. Westport, CT: Meckler Corporation.
- McLellan, H. (1993). Sharing the Vision: Interview with Dr. Thomas Furness, Director, Human Interface Technology Lab, University of Washington, Seattle, Washington. Virtual Reality World, 1(2), p-t.
- McLellan, H. (1994). Getting Started in Virtual Reality: An Introduction. In Proceedings of the VR '94: London Virtual Reality Expo 94, the Fourth Annual Conference on Virtual Reality, (pp. 30-34). : Mecklermedia.
- McLellan, H. (1994). Beam Me Up To My Avatar. Virtual Reality World, 2(2), 33-39.
- McLellan, H. (1994). Virtual Reality and Multiple Intelligences: Potentials for Higher Education. Journal of Computing in Higher Education, 5(2), 33-66.
- McLellan, H. (1994). Virtual Reality: A Syllabus for a Course on Virtual Reality and Education (Instructional materials) : Emporia, KS: McLellan/Wyatt Consulting.

McLellan, H. (1995). Virtual Field Trips: The Jason Project. *VR World*, 3(1), 49-50.

McLellan, H. (1996). Virtual Realities. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology*, (pp. 457-487). New York, NY: Macmillan.

McLellan, H. (1996). "Being Digital": Implications for Education. *Educational Technology*, 36(6), 5-20.

McLin, D. M., & Chung, J. C. (1996). Combining virtual reality and multimedia techniques for effective maintenance training. In *Proceedings of the 24th AIPR Workshop: Tools and Techniques for Modeling and Simulation*, (pp. 204-210). : SPIE.

McNeely, W. A. (1993). Robotic Graphics: A New Approach to Force Feedback for Virtual Reality. In *Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93*, (pp. 336-341). : IEEE Service Center.

McNeely, W., Burdea, G. C., Hannaford, B., Hirose, M., Jacobsen, S., Salisbury, K., & Tachi, S. (1995). Panel: Whither Force Feedback? In *Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95*, (pp. 226-229). : IEEE Computer Society Press.

McNeill, M. (1992). Virtual Reality Research at the National Center for Supercomputing Applications. In *Proceedings of the Virtual Reality '92, VR Becomes a Business*, (pp. 115-117). : Meckler Publishing.

Meares, D. J. (1992). Multichannel Sound Systems for HDTV. *Applied Acoustics*, 36(3-4), 245-258.

Mears, J. E., Hughes, C. E., & Moshell, J. M. (1988). Designing Training Scenarios by Rehearsal. In *Proceedings of the IEEE Workshop on Visual Languages*, (pp. 207-212). : IEEE Computer Society Press.

Meech, J. F., & Baker, M. (1993). Sociological Effects of Virtual Reality: A Discussion [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.

Meglan, D. A., Raju, R., Merril, G. L., Merril, J. R., Nghuyen, B. H., Swamy, S. N., & Higgins, G. A. (1996). The Teleos Virtual Environment Toolkit for Simulation-Based Surgical Education. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 346-351). Washington, DC: IOS Press.

Meglan, D. (1996). Making Surgical Simulation Real. *Computer Graphics [Focus: "Real" Virtual Reality]*, 30(4), 37-39.

Mehdian, M., & Rahnejat, H. (1989). Sensory Gripper Using Tactile Sensors for Object Recognition, Orientation Control, and Stable Manipulation. *IEEE Transactions on Systems, Man and Cybernetics*, 19(5), 1250-1260.

Meiyappan, S., & Ann, H. P. (1994). Interactive Visualization of a Beating Heart: A Medical Application of the Virtual Workbench. In *Proceedings of the VRST '94: Virtual Reality Software and Technology*, (pp. 315-318). : World Scientific Publishing Co, Inc.

Meliza, L. L. (1993). Measuring the Performance of Armor Platoons in the SIMNET Environment. In *Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting, Designing for Diversity*, (pp. 1186-1190). : Human Factors Society.

- Meller, G., Tepper, R., Bergman, M., & Anderhub, B. (1996). The Tradeoffs of Successful Simulation. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 565-571). Washington, DC: IOS Press.
- Meloni, D., Mura, A., Nucci, F. S., Cangelosi, A., & Ligorio, M. B. (1996). Virtual ECHO: An interface for a simulated environment. *SIGCHI Bulletin*, 28(3), 97-101.
- Melzer, J. E., & Moffitt, K. (1989). Partial Binocular-Overlap in Helmet-Mounted Displays. In *Proceedings of the Display System Optics II*, (pp. 56-62). : SPIE.
- Mercurio, P. J., Elvins, T. T., Young, S. J., Cohen, P. S., Fall, K. R., & Ellisman, M. H. (1992). The Distributed Laboratory: An Interactive Visualization Environment for Electron Microscopy and 3D Imaging. *Communications of the ACM*, 35(6), 54-63.
- Meregalli, A., Brizzi, A., & Perucelli, G. (1994). Telepresence Application for Real Task Efficiency Improvement in a Wide and Hostile Environment. In *Proceedings of the Telemanipulator and Telepresence Technologies*, (pp. 148-159). : SPIE.
- Merickel, M. L. (1990, December). The Creative Technologies Project: Will Training in 2D/3D Graphics Enhance Kids' Cognitive Skills? *Computers in the Schools*, 9(1), 1-5.
- Merickel, M. L. (1992). A Study of the Relationship between Virtual Reality (Perceived Realism) and the Ability of Children to Create, Manipulate and Utilize Mental Images for Spatially Related Problem Solving. In *Proceedings of the Annual Convention of the National School Boards Association*, (pp. 9: 1). : EDRS.
- Merickel, M. L. (1994). The relationship between perceived realism and the cognitive abilities of children. *Journal of Research on Computing in Education*, 26(3), 371-381.
- Merlyn, P. R. (1996). Emerging Robotics Technology and its Transformation of Practices in Healthcare. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 572-582). Washington, DC: IOS Press.
- Merrell, R. C. (1994). Virtual Reality: Perspectives of a Medical Educator. In *Proceedings of the Virtual Reality and Medicine: The Cutting Edge*, (pp. 122-134). : SIG-Advanced Applications, Inc.
- Merril, J. R. (1993). Surgery on the Cutting-Edge: Virtual Reality Applications in Medical Education. *Virtual Reality World*, 1(3 and 4), 34-38.
- Merril, J. R., Notaroberto, N. F., Laby, D. M., Rabinowitz, A. M., & Piemme, T. E. (1993). The Ophthalmic Retrobulbar Injection Simulator (ORIS): an application of virtual reality to medical education. In *Proceedings of the Sixteenth Annual Symposium on Computer Applications in Medical Care*, (pp. 702-706). : McGraw-Hill.
- Merril, J. R. (1994). Presentation Material: Medicine Meets Virtual Reality II. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 158-159). : Aligned Management Associates.
- Merril, J. R. (1994). Surgical Simulation Using VR Technology. In *Proceedings of the Virtual Reality and Medicine: The Cutting Edge*, (pp. 77-86). : SIG-Advanced Applications, Inc.

- Merril, J. R. (1994). Why I Simulate Surgery...Notes from the Surgical Field. *Virtual Reality World*, 2(6), 54-57.
- Merril, J. R. (1994). Revealing the Mysteries of the Brain with VR. *Virtual Reality Special Report*, 1(4), 61-66.
- Merril, J. R., & Brody, F. (1994). Inventing the Future with Virtual Surgery. *Virtual Reality Special Report*, 1(3), 65-70.
- Merril, J. R., Raju, R., & Roy, R. T. (1994). VR Applications in Medical Education. *Virtual Reality [Special Report]*, 1, 61-65.
- Merril, J. R., Roy, R., & Raju, R. (1994). Virtual Reality for Trade Shows and Individual Physician Training. *Virtual Reality Systems*, 1(3), 40-44.
- Merril, J., Allman, S., Merril, G., & Roy, R. (1994). Virtual heart surgery: trade show and medical education. *Virtual Reality World*, 2(4), 55-57.
- Merril, J. R. (1994). VR for medical training and trade show "fly-paper". *Virtual Reality World*, 2(3), 53-57.
- Merril, J. R., Merril, G. L., Raju, R., Millman, A., Meglan, D., Preminger, G. M., Roy, R., & Babyan, R. (1995). Photorealistic Interactive Three-Dimensional Graphics in Surgical. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 244-252). Amsterdam: IOS Press.
- Merril, J. R., Millman, A., Raju, R., & Roy, R. (1995). Window to the Soul. *VR World*, 3(1), 51-53.
- Merril, G., Raju, R., & Merril, J. (1995). Changing the focus of surgical training. *VR World*, 3(2), 56-58, 60-61.
- Merril, G. L., & Barker, V. L. (1996). Virtual reality debuts in the teaching laboratory in nursing. *Journal of Intravenous Nursing*, 19(4), 182-187.
- Merritt, J. O. (1989). Virtual Window Viewing Geometry. In *Proceedings of the Sensor Fusion: Spatial Reasoning and Scene Interpretation*, (pp. 386-392). : SPIE.
- Merryman, R. F. K. (1994). Vista Sabre II: integration of helmet-mounted tracker/display and high off-boresight missile seeker into F-15 aircraft. In *Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements*, (pp. 173-84). : SPIE.
- Merwin, D. H., Vincow, M. A., & Wickens, C. D. (1994). Visual Analysis of Scientific Data: Comparison of 3D Topographic, Color, and Gray Scale Displays in a Feature Detection Task. In *Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting*, (pp. 240-244). : Human Factors and Ergonomics Society.
- Meseure, P., Rouland, J. F., Dubois, P., Karpf, S., & Chaillou, C. (1995). SOPHOCLE: a retinal laser photocoagulation simulator overview. In *Proceedings of the CVRMed '95: Computer Vision, Virtual Reality and Robotics in Medicine*, (pp. 105-114). : Springer-Verlag.
- Metzger, P. (1993). Adding Reality to the Virtual. In *Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93*, (pp. 7-13). : IEEE Service Center.
- Meyer, K., Applewhite, H. L., & Biocca, F. A. (1992). A Survey of Position-Trackers. *Presence: Teleoperators and Virtual Environments*, 1(2), 173-200.

- Meyer, L. (1992). Monitor Selection Criteria for Stereoscopic Displays. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 211-214). : SPIE.
- Meyer, C., & Dunn-Roberts, R. (1992, September). Virtual Reality: A Strategy for Training in Cross-Cultural Communication. *Educational Media International*, 29(3), 175-180.
- Meyer, T., & Globus, A. (1993). Direct manipulation of isosurfaces and cutting planes in virtual environments (Technical Report CS-93-54): Brown University, Computer Science Department.
- Meyer, D. M., Meyer, E. S., Meyer, J. I., & Meyer, S. I. (1995). The Virtual Hospital: Networks of Information Alleys, Streets, Boulevards... In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 253-262). Amsterdam: IOS Press.
- Meyer, T., & Conner, D. B. (1996). Adding Behavior to VRML. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium, (pp. 45-52). : ACM.
- Miclin, D. M., & Chung, J. C. (1996). Combining Virtual Reality and Multimedia Techniques for Effective Maintenance Training. In Proceedings of the 24th AIPR Workshop on Tools and Techniques for Modeling and Simulation, (pp. 204-210). : SPIE.
- Middleton, T. (1992). Applications of Virtual Reality to Learning. *Interactive Learning International*, 8(4), 253-257.
- Milgram, P., Zhai, S., Drasic, D., & Grodski, J. (1993). Applications of Augmented Reality for Human-Robot Communication. In Proceedings of the IROS '93: the 1993 IEEE/RSJ International Conference on Intelligent Robots and Systems, Intelligent Robots for Flexibility, (pp. 1467-1472). : IEEE.
- Milgram, P., Takemura, H., Utsumi, A., & Kishino, F. (1994). Augmented reality: a class of displays on the reality-virtuality continuum. In Proceedings of the Telemanipulator and Telepresence Technologies, (pp. 282-292). : SPIE.
- Milgram, P., & Kishino, F. (1994 September). A Taxonomy of Mixed Reality Visual Displays. *IEICE Transactions on Information and Systems*, E77-D(9), 1321-1329.
- Milgram, P., Ratogi, A., & Grodski, J. J. (1995). Telerobotic Control Using Augmented Reality. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 21-29). : IEEE.
- Milheim, W. D. (1995). Virtual Reality and Its Potential Application in Education and Training. *Machine-Mediated Learning*, 5(1), 43-55.
- Miller, D. F., & Mitchell, T. (1990). 2D/3D Comparison using Commercial Vision Products. In Proceedings of the Stereoscopic Displays and Applications, (pp. 272-279). :
- Miller, R. K., & Rupnow, M. E. (1991). Virtual Reality. (Vol. 201). Liburn, GA: Future Technology Surveys.
- Miller, C. (1992). Virtual Reality and On-line Databases: Will "Look and Feel" Literally Mean "Look" and "Feel". *On-line*, 16(6), 12-13.
- Miller, C. (1992). On-line Interviews Dr. Thomas A. Furness III, Virtual Reality Pioneer. *On-line*, 16(6), 14-27.
- Millman, P. A., Stanley, M., & Colgate, J. E. (1993). Design of a High Performance Haptic Interface to Virtual Environments. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 216-222). : IEEE Service Center.

- Mills, P. H., Fuchs, H., & Pizer, S. M. (1984). High-Speed Interaction on a Vibrating-Mirror 3D Display. In Proceedings of the Processing and Display of Three-Dimensional Information II, (pp. 93-101). : SPIE.
- Mills, P. H., & Fuchs, H. (1990). 3D Ultrasound Display Using Optical Tracking. In Proceedings of the The First Conference on Visualization in Biomedical Computing, (pp. 490-497). : IEEE.
- Min, P., & Jense, H. (1994). Interactive Stereoscopy Optimization for Head-Mounted Displays. In Proceedings of the Stereoscopic Display and Virtual Reality Systems: The Engineering Reality of Virtual Reality, (pp. 306-316). : SPIE.
- Mine, M., & Bishop, G. (1993). Just-In-Time Pixels (TR93-005): Chapel Hill, NC: Dept. of Computer Science, University of North Carolina.
- Mine, M. (1994). Characterization of End-to-End Delays in Head-Mounted Display Systems. In Proceedings of the ACM SIGGRAPH 1994, (pp. B:1-B:11). : ACM.
- Mine, M. (1994). Interaction in a Virtual Environment. In Proceedings of the ACM SIGGRAPH 1994, (pp. 4:1-4:20). : ACM.
- Mine, M. R., & Weber, H. (1995). Large Models for Virtual Environments: A Review of Work by the Architectural Walkthrough Project and UNC. Presence: Teleoperators and Virtual Environments, 5(1), 136-145.
- Mine, M. R. (1995). Virtual Environment Interaction Techniques (TR95-018): Chapel Hill, NC: Dept. of Computer Science, University of North Carolina.
- Miner, N. E., & Stansfield, S. A. (1994). An interactive virtual reality simulation system for robot control and operator training. In Proceedings of the 1994 IEEE International Conference on Robotics and Automation, (pp. 1428-1435). : IEEE Computer Society Press.
- Minkoff, M. (1993). The Fern Model: An Explanation with Examples (Unpublished HITL Technical Report): Seattle, WA: Human Interface Technology Laboratory.
- Minkoff, M. (1993). The Participant System: Providing the Interface in Virtual Reality. Unpublished Unpublished master of science thesis, Seattle, WA: College of Engineering, University of Washington.
- Minsky, M., Ouh-Young, M., Steele, O., Brooks, F. P. J., & Behensky, M. (1990). Feeling and Seeing: Issues in Force Display. In Proceedings of the 1990 Symposium on Interactive 3D Graphics, (pp. 235-243). : ACM.
- Miranda, J. E. P., & Pinto, J. S. (1996). Using Internet technology for course support. SIGCSE Bulletin [special issue], 28, 96-100.
- Miritch, B., & Canny, J. (1995). Impulse-based Simulation of Rigid Bodies. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 181-188). : ACM.
- Mitchell, W. (1993). The Electronic Agora. Architecture New York, 1(3), 30-33.
- Mitchell, D. (1995). Virtual Reality and the Internet. Virtual Reality Special Report, 2(1), 35-41.
- Mitchell, K., Kerdoncuff, G., & May, G. S. (1995). The "virtual" cleanroom: microelectronics processing education through interactive multimedia. In Proceedings of the Eleventh Biennial University/Government/Industry Microelectronics Symposium, (pp. 224-229). : IEEE.

- Mitchell, W. J. (1995 Summer). Recombinant Architecture. *Presence: Teleoperators and Virtual Environments*, 4(3), 223-253.
- Mitchell, J., Liddle, J., Brown, K., & Leitch, R. (1996). Integrating Simulations into Intelligent Tutoring Systems. In Proceedings of the Euro AI~ed: European Conference on AI in Education, (pp. unpaginated). : University of Leeds.
- Mitobe, K., Takahashi, M., Kato, M., Kimura, M., & Ifukube, T. (1994). Consideration of the 'Sensory-Motor Coordination' to an Optic and an Acoustic Stimulation. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 84-89). : IEEE.
- Mitsuishi, M., Hori, T., & Nagao, T. (1993). Predictive Force Display Tele-Handling/Machine System. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 160-164). : IEEE.
- Mitsuishi, M., Watanabe, T., Nakanishi, H., Hori, T., Asai, R., & Watanabe, H. (1995). A Tele-micro-surgery System That Shows What the User Wants to See. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 237-246). : IEEE.
- Mitsutake, N., Hoshiai, K., Igarashi, H., Sugioka, Y., Yamamoto, Y., Yamazaki, K., Yoshida, A., & Yamaguchi, T. (1993). Open Sesame from Top of Your Head - An Event Related Potential Based Interface for the Control of the Virtual Reality System. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 292-295). : IEEE.
- Miyazaki, S., Yasuda, T., Yokoi, S., & Toriwaki, J. I. (1996). An Origami Playing Simulator in the Virtual Space. *Journal of Visualization and Computer Animation*, 7(1), 25-42.
- Miyoshi, M., & Koizumi, N. (1992). NNT's Research on Acoustics for Future Telecommunication Services. *Applied Acoustics*, 36(3-4), 307-326.
- Mizell, D. W. (1994). Virtual reality and augmented reality in aircraft design and manufacturing. In Proceedings of the Wescon/94, (pp. 91). : IEEE.
- Mizell, D., Jones, S., Jackson, P., & Pickett, D. (1995). Is VR Better than a Workstation? A Report on Human Performance Experiments in Progress. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 1-7). New York, NY: SpringerWien.
- Mizukami, Y., Morita, S., Asano, K., & Kamiji, N. (1995). Substation simulation system using virtual reality technology. *Electrical Engineering in Japan*, 115(8), 109-120.
- Moccozet, L., & Kalra, P. (1993). Interactive and Controlled Synthesis of 3D Irregular Shapes. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 179-198). New York, NY: John Wiley and Sons.
- Mochizuki, H., Takemura, H., & Kishino, F. (1992). Object Manipulation and Layout in a 3-D Virtual Space Using a Combination of Natural Language and Hand Pointing. In Proceedings of the Sensor Fusion V, (pp. 106-115). : SPIE.
- Mochizuki, H., & Kobayashi, S. (1994). HDTV single camera 3D system and its application in microsurgery. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems, (pp. 31-34). : SPIE.
- Moezzi, S., Katkere, A., Kuramura, D. Y., & Jain, R. (1996). An Emerging Medium: Interactive Three-Dimensional Digital Video. In Proceedings of the International Conference on Multimedia Computing and Systems, (pp. 358-361). : IEEE Computer Society Press.

- Moezzi, S. (1996). Immersive Video. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 17-24). : IEEE Computer Society Press.
- Moezzi, S., Katkere, A., Kuramura, D. Y., & Jain, R. (1996). Reality Modeling and Visualization from Multiple Video Sequences. *IEEE Computer Graphics and Applications*, 16(6), 58-63.
- Mogal, J. S. (1992). Immersive Visualization System Architectures. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 118-124). : Meckler Publishing.
- Mogal, J. (1993). Virtual Reality - A Primer. *IRIS Universe*(25), 22-24.
- Mogal, J. (1993). VR Technologies - Full Immersion. *IRIS Universe*(25), 28-33.
- Mohl, R. (1981). Cognitive Space in the Interactive Movie Map: An Investigation of Spatial Learning in Virtual Environments. Unpublished Ph.D. dissertation, Cambridge, MA: Education and Media Technology Dept., Massachusetts Institute of Technology.
- Mohn, H. L. (1994). Implementation of a Tactical Mission Planner for Command and Control of Computer Generated Forces in MODSAF. Unpublished Master of Science, Monterey, CA: Naval Postgraduate School.
- Molin, S.-O., Jiras, A., Hall-Angeras, M., Falk, A., Martens, D., Gilja, O. H., Nesje, L. B., & Odegaard, S. (1996). Virtual Reality in Surgical Practice In Vitro and In Vivo Evaluations. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 246-256). Washington, DC: IOS Press.
- Moller, H. (1992). Fundamentals of Binaural Technology. *Applied Acoustics*, 36(3-4), 171-218.
- Molnar, S., Eyles, J., & Poulton, J. (1992). PixelFlow: High-Speed Rendering Using Image Composition. In Proceedings of the SIGGRAPH '92, (pp. 231-240). : ACM.
- Mon-Williams, M. A., Wann, J. P., Rushton, S. K., & Ackerley, R. (1993). Real Problems with Virtual Worlds. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.
- Mon-Williams, M. A., Wann, J. P., & Rushton, S. (1993). Binocular Vision in a Virtual World: Visual Deficits Following the Wearing of a Head-Mounted Display. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 387-391.
- Moncrief, J. W., & Sorrels, P. A. J. (1996). Primary Care and Hemodialysis Monitoring through Telemedicine. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 250-254). Washington, DC: IOS Press.
- Moncur, J. T., Rosen, J. M., Zhu, S., & Limonadi, F. M. (1996). Medical Electronic Link (MEL): Providing Telemedicine on the World Wide Web. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 328-336). Washington, DC: IOS Press.
- Mones-Hattal, B., & Mandes, E. (1995). Enhancing Visual Thinking and Learning with Computer Graphics and Virtual Environment Design. *Computers & Graphics*, 19(6), 889-894.
- Monheit, G., & Badler, N. I. (1991). A Kinematic Model of The Human Spine And Torso. *IEEE Computer Graphics And Applications*, 11(2), 29-38.

- Monkman, G. J. (1992). An Electrorheological Tactile Display. *Presence: Teleoperators and Virtual Environments*, 1(2), 219-228.
- Monnard, J., & Pasquier-Boltuck, J. (1993). WEBs: An Electronic Book Shell with an Object-oriented Scripting Environment. In N. M. Thalmann & D. Thalman (Eds.), *Virtual Worlds and Multimedia*, (pp. 69-84). New York, NY: John Wiley and Sons.
- Montefusco, D. (1995). VR: Alive and Well in Sweden. *VR World*, 3(3), 12-13.
- Montoya, R. J. (1994). Applied Virtual Reality. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 11-20). : NASA Conference Publications.
- Moore, N. (1993, March). How to Create a Low-Cost Virtual Reality Network. *Educational Media International*, 30(1), 37-39.
- Moore, P. (1995). Learning and Teaching in Virtual Worlds: Implications of Virtual Reality for Education. *Australian Journal of Educational Technology*, 11(2), 91-102.
- Mori, H., Kotani, S., & Kiyohiro, N. (1994). Human Interface of a Robotic Travel Aid. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 90-94). : IEEE.
- Morimoto, A. K., Foral, R. D., Kuhlman, J. L., Zucker, K. A., Curet, M. J., Bocklage, T., MacFarlane, T. I., & Kory, L. (1996). Force Sensor for Laparoscopic Babcock. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 349-353). Washington, DC: IOS Press.
- Morin, J. E., Klein, S. A., Verdi, M. G., Mehl, D. C., Gimbel, H. V., Cuzzani, O., & Gupta, S. C. (1996). Introduction of New TeleMedicine Applications into Ophthalmology: Standardized Evaluation of Transmission Modalities. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 642-648). Washington, DC: IOS Press.
- Morishima, S., & Harashima, H. (1993). Facial Expression Synthesis Based on Natural Voice for Virtual Face-to-Face Communication with Machine. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 486-491). : IEEE Service Center.
- Morishima, S. (1995). Face to Face Communication with Virtual People. In Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing, (pp. 120-137). : ATR International.
- Morris, T., & Donath, M. (1993). Using a Maximum Error Statistic to Evaluate Measurement Errors in 3D Position and Orientation Tracking Systems. *Presence: Teleoperators and Virtual Environments*, 2(4), 314-343.
- Morrison, J. (1993). Virtual Reality by Degrees. *CADalyst*, 10(9), 52-56.
- Morrison, J. (1995). The VR-Link(tm) Networked Virtual Environment Software Infrastructure. *Presence: Teleoperators and Virtual Environments*, 4(2), 194-208.
- Morton, R. (1995). Communication in Medical Education: The Future for Specialist Services. *Journal of Biocommunication (JBC)*, 22(3), 8-11.
- Moser, M. A., & McLeod, D. (Eds.). (1995). *Immersed in Technology Art and Virtual Environments*. Cambridge, MA: MIT Press.
- Moshell, J. M., In, L., Hughes, C. E., Blau, B., & Godless, B. (1990). Nap-of-Earth Flight and Real-time Simulation of Dynamic Terrain: A 3-D Virtual Space Using a Combination of Natural Language and Hand Pointing. In Proceedings of the Cockpit Displays and Visual Simulation, (pp. 118-129). : SPIE.

- Moshell, M., Blau, B., & Dunn-Roberts, R. (1993). Virtual Environments for Military Training: SIMNET, Ender's Game, and Beyond. *Virtual Reality World* [insert in Multimedia Review], 1(2), v-ad.
- Moshell, J. M., Blau, B. S., Knerr, B., Lampton, D. R., & Bliss, J. P. (1993). A research testbed for virtual environment training applications. In Proceedings of the IEEE Virtual Reality Annual International Symposium (VRAIS), (pp. 83-99). : IEEE.
- Moshell, J. M., Smart, E. A., Dunn-Roberts, R., Blau, B., & Lisle, C. R. (1993). Virtual reality: its potential impact on embedded training. In Proceedings of the Advanced Technologies Applied to Training Design, (pp. 191-205). : Plenum.
- Moshell, M. (1993 February). Three Views of Virtual Reality: Virtual Environments in the US Military. *IEEE Computer*, 26(2), 81-82.
- Moshell, J. M., & Hughes, C. E. (1994). Shared Virtual Worlds for Education. *Virtual Reality World*, 2(1), 63-74.
- Moshell, J. M., & Dunn-Roberts, R. (1994). A Survey of Virtual Environments: Research in North America [Part Two]. *Virtual Reality World*, 2(1), 24-36.
- Moshell, J. M., Blau, B., Xin, L., & Lisle, C. (1994). Dynamic Terrain (simulation project). *Simulation*, 62(1), 29-40.
- Moshell, J. M., Cortes, A., Clarke, T., Abel, K. C., Kilby, M., Lisle, C. R., Mapes, D. P., & Morie, J. F. (1995). Research in Virtual Environments and Simulation at the Institute for Simulation and Training of the University of Central Florida. *Presence: Teleoperators and Virtual Environments*, 4(2), 209-217.
- Moshell, J. M., & Hughes, C. E. (1996). The Virtual Academy: A Simulated Environment for Constructionist Learning. *International Journal of Human-Computer Interaction*, 8(1), 95-110.
- Moubaraki, L., Ohya, J., & Kishino, F. (1995). Realistic 3D Facial Animation in Virtual Space Teleconferencing. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 253-258). : IEEE.
- Mourant, R. R., Qui, N., & Chiu, S. A. (1997). A Distributed Virtual Driving Simulator [poster paper]. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 208). : IEEE Computer Society Press.
- Mowafy, L., Russo, T., & Miller, L. (1993). Is "presence" a training issue? In Proceedings of the IEEE 1993 Symposium on Research Frontiers in Virtual Reality (VRAIS), (pp. 124-125). : IEEE Computer Society Press.
- Mowafy, L., & Thurman, R. A. (1993). Training pilots to visualize large-scale spatial relationships in a stereoscopic display. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 72-81). : SPIE.
- Mowafy, L., Pollack, J., Stang, M., & Wallace, L. (1995). Training independent living skills in a "barrier-free" virtual world. In Proceedings of the Symbiosis of Human and Artifact, the Sixth International Conference on Human-Computer Interactions, (pp. 511-516). : Elsevier.
- Mueller, C. (1995). The Sort-First Rendering Architecture for High-Performance Graphics. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 75-84). : ACM.
- Muffoletto, R. (1994). Schools and Technology in a Democratic Society: Equity and Social Justice. *Educational Technology*, 34(2), 52-54.

- Muhlbach, L., Bocker, M., & Prussog, A. (1995). Telepresence in Videocommunications: A Study on Stereoscopy and Individual Eye Contact. *Human Factors* [special issue: Telecommunications], 37(2), 290-305.
- Muller, W. K., Ziegler, R., Bauer, A., & Soldner, E. H. (1995). Virtual reality in surgical arthroscopic training. *Journal of Image Guided Surgery*, 1(5), 288-294.
- Muller, W., Grosskopf, S., Hildebrand, A., Malkowitz, R., & Ziegler, R. (1996). Virtual Reality in the Operating Room of the Future. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 224-231). Washington, DC: IOS Press.
- Muller, M. J., Wharton, C., Melver, J., W. J., & Laux, L. (1997). Toward and HCI Research and Practice Agenda Based on Human Needs and Social Responsibility. In *Proceedings of the CHI '97: Human Factors in Computing Systems*, (pp. 155-161). : ACM, Inc.
- Mulliner, S. J. (1997). Research study into the impact of telemedicine on rural GP practices. In *Proceedings of the IEE Colloquium on Technologies Supporting the Remote Delivery of Health and Care Services*, (pp. 8/1-5). : IEE.
- Munne, J. J. S., Peshkin, M. A., Mirkovic, S., Stulberg, S. D., & Kienzle, T. C. (1995). A Stereotactic and Robotic System for Pedicle Screw Placement. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 326-333). Amsterdam: IOS Press.
- Munzner, T., & Burchard, P. (1996). Visualizing the Structure of the World Wide Web in 3D Hyperbolic Space. In *Proceedings of the Virtual Reality Modeling Language (VRML) Symposium*, (pp. 33-38). : ACM.
- Murphy, H. J. (Ed.). (1992). *Virtual Reality and the Physically Disabled: Speculations of the Future*. Northridge, CA: CSUN.
- Murphy, R. R., & Rogers, E. (1996). Cooperative Assistance for Remote Robot Supervision: Teleoperators and Virtual Environments, 5(2), 224-240.
- Murray, S. A. (1995). The NRaD virtual presence program. In *Proceedings of the Symbiosis of Human and Artifact, the Sixth International Conference on Human-Computer Interactions*, (pp. 493-498). : Elsevier.
- Muscott, H. S., & Gifford, T. (1994). Virtual Reality and Social Skills Training for Students with Behavioral Disorders: Applications, Challenges and Promising Practices. *Education and Treatment of Children*, 17(4), 17-34.
- Musits, B. L. (1994). A Robot for Total Hip Replacement Surgery. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 162-164). : Aligned Management Associates.
- Musits, B. L., & Carbone, E. J. (1994). Three-Dimensional Imaging and Robotics. *Virtual Reality Systems*, 1(3), 20-23.
- Mynatt, E. D. (1994). Auditory Presentation of Graphical User Interfaces. In *Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces*, (pp. 533-556). : Addison-Wesley Publishing Company.
- Mynatt, E. D., Adler, A., Ito, M., & O'Day, V. L. (1997). Design for Network Communities. In *Proceedings of the CHI '97: Human Factors in Computing Systems*, (pp. 210-217). : ACM, Inc.

- Nadeau, D. R., & Moreland, J. L. (1996). The Virtual Reality Behavior System (VRBS): A Behavior Protocol for VRML. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium, (pp. 53-62). : ACM.
- Nadis, S. (1995). Virtual Therapy: a Little Bit of Electronic Vertigo may Cure the Acrophobe. *Omni*, 17(6), 20.
- Nagamatsu, T., Ishizaka, H., Takeoka, S., Takahasi, M., & Yoshikawa, H. (1995). Virtual Environment for Integrated Design Support. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 369-374). : IEEE.
- Nahvi, M. (1996). Dynamics of student-computer interaction in a simulation environment: reflections on curricular issues. In Proceedings of the FIE (Frontiers in Education) '96, 26th Annual Conference: Technology-Based Re-Engineering. Engineering Education, (pp. 1383-1386). : IEEE.
- Nai-Wai-Hsu. (1994). Huan Shi and Virtual Reality. *Leonardo*, 27(4), 289-291.
- Naiman, A. (1992). Presence, and Other Gifts or, What Is Reality? Why? Who Cares Anyway? *Presence: Teleoperators and Virtual Environments*, 1(1), 145-148.
- Naimark, M. (1991). Elements of Realspace Imaging: A Proposed Taxonomy. In Proceedings of the Stereoscopic Displays and Applications II, (pp. 169-179). : SPIE.
- Naimark, M. (1992). Elements of Realspace Imaging (Apple Multimedia Lab Technical Report): Cupertino, CA: Apple Computer.
- Nakajima, A., Sakairi, T., Ando, F., Shinozaki, M., & Kurosawa, T. (1993). A Multimedia Teleteaching System Using an Electronic Whiteboard for Two-Way Communication of Motion Videos and Chalkboards. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 436-441). : IEEE.
- Nakajima, R., Nomura, J., Fukushima, S., & Ojika, T. (1994). A Relax-Refresh System Applying Virtual Reality. In Proceedings of the RO-MAN '94 3rd IEEE International Workshop on Robot and Human Communication, (pp. 145-150). : IEEE.
- Nakajima, A., Sakairi, T., Ando, F., & Shinozaki, M. (1994 September). A Two-Way Dual-View Teleteaching System Conveying Gestures and Chalkboard Contents. *IEICE Transactions on Information and Systems*, E77-D(9), 1335-1343.
- Nakajima, Y. (1994 September). Video Browsing Using Fast Scene Cut Detection for an Efficient Networked Video Database Access. *IEICE Transactions on Information and Systems*, E77-D(9), 1355-1364.
- Nakamura, N., Nemoto, K., & Shinohara, K. (1994). Distributed Virtual Reality System for Cooperative Work. *NEC Research and Development*, 35(4), 403-409.
- Nakata, H. (1996 August). The Virtual Meiji Village. *Computer Graphics*, 30(3), 49-50.
- Nakatsu, R. (1996). Virtual Reality Technology Adopting an Artistic Approach. *Transactions of the Virtual Reality Society of Japan*, 1(1), 1-9.
- Nam, Y., & Wohn, K. Y. (1996 July). Recognition of Space-Time Hand-Gestures using Hidden Markov Model. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 51-58). : ACM.
- Nara, H., Ifukube, T., Ino, S., Takahashi, M., & Yamamoto, K. (1996). Effects of Moving Visual Stimulation Produced from a Wide View Head MOunted Display on Postural Control. *Transactions of the Virtual Reality Society of Japan*, 1(1), 33-39.

- Nash, I. (1991, Sept. 6). Visions for a Braver World. Virtual Reality Computer Simulations as an Aid to Teaching Science. *Times Educational Supplement*, 3923, 12.
- Nashman, M., & Chaconas, K. (1990). Three-Dimensional Position Determination from Motion. In *Proceedings of the Sensor Fusion III: 3-D Perception and Recognition*, (pp. 166-175). : SPIE.
- Nations, S., Moorhead, R., Gaither, K., Aukstakalnis, S., Vickery, R., Couvillion, W. C., Fox, D. N., Flynn, P., Wallcraft, A., Hogan, P., & Smedstad, O. M. (1996). Interactive Visualization of Ocean Circulation Models. In *Proceedings of the Visualization '96*, (pp. 429-432, 515). : ACM.
- Natonek, E., Zimmerman, T., & Fluckiger, L. (1995). Model-Based Vision as Feedback for Virtual Reality Robotics Environments. In *Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95*, (pp. 110-117). : IEEE Computer Society Press.
- Naylor, B. F. (1990). SCULPT: An Interactive Solid Modeling Tool. In *Proceedings of the Graphics Interface 90*, (pp. 138-148). : Canadian Information Processing Society.
- Naylor, B. (1995). Interactive Playing with Large Synthetic Environments. In *Proceedings of the 1995 Symposium on Interactive 3D Graphics*, (pp. 107-108). : ACM.
- Neale, D. C. (1996). Spatial Perception in Desktop Virtual Environments. In *Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting*, (pp. 1117-1121). : HFES.
- Neil, M. J. (1996). Architectural Virtual Reality Applications. *Computer Graphics [Focus: "Real" Virtual Reality]*, 30(4), 53-54.
- Nelson, T. H. (1992). How Many Ds in Reality? In *Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality*, (pp. 154-174). : Meckler.
- Nelson, M., Cavaiuolo, M., & Yakovleff, A. (1993). A Heterogeneous Architecture for Stereoscopic Visualization. In *Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93*, (pp. 349-356). : IEEE Service Center.
- Nelson, W. A. (1993). Knowledge Acquisition and Interface Design for Learning-on-Demand Systems. In *Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology*, (pp. 321-327). : NASA.
- Nelson, T. R., Pretorius, D. H., & Davidson, T. E. (1996). Initial Clinical Experience with an Interactive Volume Sonography Visualization System. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 21-35). Washington, DC: IOS Press.
- Nelson, T. R., & Kellner, A. L. (1996). High-Performance Clinical Patient Data Review and Consultation System. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 289-297). Washington, DC: IOS Press.
- Nelson, W. T., Hettinger, L. J., Cunningham, J. A., Roe, M. M., Haas, M. W., & Dennis, L. B. (1997). Navigating Through Virtual Flight Environments Using Brain-Body-Actuated Control. In *Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium*, (pp. 30-37). : IEEE Computer Society Press.

- Nemire, K., & Ellis, S. R. (1993). Calibration and Evaluation of Virtual Environment Displays. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 33-40). : IEEE Society Press.
- Nemire, K., Burke, A., & Jacoby, R. (1993). A Virtual Learning Environment for Disabled Students. In Proceedings of the First Annual International Conference of Virtual Reality and Persons with Disabilities, (pp. 81-92). : California State University.
- Nemire, K., Burke, A., & Jacoby, R. (1994). Human Factors Engineering of a Virtual Laboratory for Students with Physical Disabilities. *Presence: Teleoperators and Virtual Environments*, 3(3), 216-226.
- Nemire, K., Jacoby, R. H., & Ellis, S. R. (1994). Simulation Fidelity of a Virtual Environment Display. *Human Factors*, 36(1), 79-83.
- Nemire, K. (1996). Evaluating Visual and Auditory Enhancements to a Virtual-Object Manipulation Task. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 249-260). : SPIE.
- Nenov, V., & Klopp, J. (1996). Remote Access to Neurosurgical ICU Physiological Data Using the World Wide Web. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 242-249). Washington, DC: IOS Press.
- Nesi, P., & Del Bimbo, A. (1996). A Vision-Based 3-D Mouse. *International Journal of Human-Computer Studies*, 44(1), 73-91.
- Neugebauer, J. (1992). Industrial Applications of Virtual Reality: Robot Application Planning. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 92-102). : Meckler Publishing.
- Neugebauer, J. G. (1993). Virtual Reality-The Demonstration Centre. In Proceedings of the VR'93, Virtual Reality International 93: The Third Annual Conference on Virtual Reality, (pp. 72-77). : Meckler.
- Neumann, U., & Cho, Y. (1996). A Self-Tracking Augmented Reality System. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 109-113). : ACM.
- Newby, G. (1993). Virtual Reality. In M. E. Williams (Ed.), *Annual Review of Information Science and Technology*, (Vol. 28, pp. 187-229). Medford, NJ: Learned Information for the American Society for Information Science.
- Newby, G. B. (1993). Virtual Reality: Tomorrow's Information System, or Just Another Pretty Interface? In Proceedings of the American Society for Information Science Annual meeting, (pp. 199-203). : Learned Information for the American Society for Information Science.
- Newby, G. B. (1994). Gesture Recognition Based upon Statistical Similarity. *Presence: Teleoperators and Virtual Environments*, 3(3), 236-244.
- Newquist, H. P. (1991). A Computer-Generated Suspension of Disbelief (Virtual Reality). *AI Expert*, 6(8), 34-39.
- Newquist, H. P. (1992). Virtual Reality's Commercial Reality. *Computerworld*, 26(13), 93-95.
- Newquist, H. P. (1993, July). Virtual Phone Sex: Is It in Your Future? *AI Expert* [Virtual Reality 93 Special Report], 57-62.
- Newquist, H. P. (1993, September). The Fruits of War for Fun and Profit. *AI Expert* [Virtual Reality '93: Fall Special Report], 11-19.

- Newquist, H. P. (1994). Virtual Reality: The First TechnoDrug? *Virtual Reality Special Report*, 1(3), 57-60.
- Newquist, H. P., III. (1994). A Day in the Life of a VR User. *Virtual Reality [Special Report]*(1), 11-14.
- Nguyen, L., & Kennedy, P. J. (1993). Design Strategies and Functionality of the "Visual Interface for Virtual Interaction Development (VIVID) Tool. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 212-217). : NASA.
- Nichols, S. (1996). VR User Health and Safety - Implications for Virtual Reality Developers [poster]. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Nievergelt, J. (1993). Software for Geometric Computation: The XYZ GeoBench and Program Library. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 153-168). New York, NY: John Wiley and Sons.
- Nilan, M. S. (1992). Cognitive Space: Using Virtual Reality for Large Information Resource Management Problems. *Journal of Communication*, 42(4), 115-135.
- Nilan, M. S., Silverstein, & Lankes, R. D. (1993, July). The VR Technology Agenda in Medicine. *AI Expert [Virtual Reality 93 Special Report]*, 33-37.
- Nimeroff, J. S., Simoncelli, E., Badler, N. I., & Dorsey, J. (1995). Rendering Spaces for Architectural Environments. *Presence: Teleoperators and Virtual Environments*, 4(3), 286-297.
- Nio, S. (1993). Tele-existence Robotic System with Autonomous Vehicle. In Proceedings of the IVR '93: Industrial Virtual Reality Show and Conference, (pp. 184-193). : Reed Exhibitions Japan, Ltd.
- Nishino, H., Nakano, K., Korida, K., & Utsumiya, K. (1996). A 3D Virtual Environment for Creating New Fireworks. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 43-50). : ACM.
- Nobles, J. A., & Garrova, J. F. (1995). Design and Implementation of Real-Time, Deployable Three Dimensional Shiphandling Training Simulator. Unpublished Master's, Naval Postgraduate School, Monterey, California.
- Nojima, S., & Hashimoto, H. (1994). Master-Slave System with Force Feedback Based on Dynamics of Virtual Model. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 93-100). : NASA Conference Publications.
- Noma, H. (1995). A Palmtop Display for Dextrous Manipulation. In Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing, (pp. 145-152). : ATR International.
- Noma, H., Kitamura, Y., Miyasato, T., & Kishino, F. (1995). Multi-Point Virtual Space Teleconferencing System. *IEICE Transactions on Communications*, E78(B7), 970-978.
- Noma, H., Miyasato, T., & Kishino, F. (1996). A Palmtop Display for Dextrous Manipulation with Haptic Sensation. In Proceedings of the CHI '96: ACM Conference on Human Factors in Computing Systems, (pp. 126-134). : ACM.
- Nomura, J. (1990). Virtual Reality and its Application to Consumer Showrooms. In Proceedings of the Joint Conference for Automatic Control, (pp. 11-14). : North-Holland Publishing Company.

- Nomura, J. (1994). Virtual Reality Technologies and its Applications to Industrial Use. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 125-144). : World Scientific Publishing Co, Inc.
- Nomura, J. (1996). Virtual Housing System. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 169-177). : SpringerWien.
- Normand, V., & Tromp, J. (1996). Collaborative Virtual Environments: the COVEN Project. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 76-78). : Queen Mary & Westfield College.
- Normore, L. F. (1994). Virtual Reality and Virtual Environments. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 275-279). : Human Factors and Ergonomics Society.
- North, M. M., & North, S. M. (1994). Relative Effectiveness of Virtual Environment Desensitization and Imaginal Desensitization in the Treatment of Aerophobia. *Electronic Journal of Virtual Culture*, 2(4), 37-42.
- North, M. M., North, S. M., & Coble, J. R. (1995). Effectiveness of Virtual Environment Desensitization in the Treatment of Agoraphobia. *The International Journal of Virtual Reality: A Multimedia Publication for Professionals*, 1(2), 25-34.
- North, M. M., North, S. M., & Coble, J. R. (1996). Center for the Use of Virtual Reality Technology in the Treatment of Psychological Disorders. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 725). Washington, DC: IOS Press.
- North, S. M. (1996). Effectiveness of virtual reality in the motivational processes of learners. *International Journal of Virtual Reality*, 2(1), 17-21.
- North, M. M., North, S. M., & Coble, J. R. (1996). Effectiveness of virtual environment desensitization in the treatment of agoraphobia. *Presence: Teleoperators and Virtual Environments*, 5(3), 346-352.
- North, M. M., North, S. M., & Coble, J. R. (1997). Virtual environments psychotherapy: A case study of fear of flying disorder. *Presence: Teleoperators and Virtual Environments*, 6(1), 127-132.
- Noser, H., & Thalmann, D. (1996). The Animation of Autonomous Actors Based on Production Rules. In Proceedings of the Computer Animation '96, (pp. 47-57). : IEEE Computer Society Press.
- Nugent, W. R. (1991). Virtual Reality: Advanced Imaging Special Effects Let You Roam in Cyberspace. *Journal of the American Society for Information Science*, 42(8), 609-617.
- O'Byrne, J. E. (1995). Human Interaction within a Virtual Environment for Shipboard Training. Unpublished Master's, Naval Postgraduate School, Monterey, California.
- O'Connell, K., & Cahill, V. (1996). System Support for Scalable Distributed Virtual Worlds. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 141-142). : ACM.
- O'Hara, K., & Sellen, A. (1997). A Comparison of Reading Paper and On-Line Documents. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 335-342). : ACM, Inc.

O'Neil, J. (1995). On Technology and Schools: A Conversation with Chris Dede. *Educational Leadership*, 53(2), 6-12.

O'Sullivan, D. (1994). Choosing Tools for Virtual Environments. *Leonardo*, 27(4), 297-302.

O'Toole, R. V., Blackwell, M. K., Morgan, F. M., Gregor, L., Shefman, D., Jaramaz, B., DiGioia, A. M., & Kanade, T. (1995). Image Overlay for Surgical Enhancement and Telemedicine. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 271-273). Amsterdam: IOS Press.

Odegard, O. (1993). Telecommunications and Social Interaction, Social Constructions In Virtual Space. *Telektronikk*, 89(4), 76-82.

Odegard, O. (1995). Virtual Reality Research and Applications in the Nordic Countries. In *Proceedings of the Virtual Reality World '95*, (pp. 47-54). : IDG Conferences and Seminars.

Odegard, O., & Oygard, K. A. (1996). Learning in collaborative virtual environments- impressions from a trial using the Dovre framework. *Telektronikk*, 92(3-4), 51-58.

Oderud, T., & Kjennerud, E. (1992). Multimedia Communication Applied to Underwater Intervention. In *Proceedings of the Informatique '92, International Conference Interface to Real and Virtual Worlds*, (pp. 185-190). : EC2.

Ogi, T., & Hirose, M. (1994). Multisensory Scientific Data Sensualization Through Virtual Reality Technology. In *Proceedings of the VRST '94: Virtual Reality Software and Technology*, (pp. 145-158). : World Scientific Publishing Co, Inc.

Ogi, T., & Hirose, M. (1996). Multisensory Data Sensualization Based on Human Perception. In *Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96*, (pp. 66-72). : IEEE Computer Society Press.

Ohshima, T., Yamamoto, H., & Tamura, H. (1996). Gaze-Directed Adaptive Rendering for Interacting with Virtual Space. In *Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96*, (pp. 103-110). : IEEE Computer Society Press.

Ohtsuka, S., & Saida, S. (1994). Depth Perception from Motion Parallax in the Peripheral Vision. In *Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication*, (pp. 72-77). : IEEE.

Ohtsuka, T., Kohno, T., Nakajima, J., Miyaji, K., Furuse, A., & Omata, S. (1996). Tactile Sensor Method for Thoracoscopic Detection of Intrapulmonary Nodules. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 362-368). Washington, DC: IOS Press.

Ohya, J., Kitamura, Y., Takemura, H., Kishino, F., & Terashima, N. (1993). Real-time Reproduction of 3D Human Images in Virtual Space Teleconferencing. In *Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93*, (pp. 408-414). : IEEE Service Center.

Ohya, J. (1995). Human Posture Estimation and Reproduction of 3D Human Images. In *Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing*, (pp. 89-102). : ATR International.

Ohya, J., Kitamura, Y., Kishino, F., & Terashima, N. (1995). Virtual Space Teleconferencing: Real-Time Reproduction of 3D Human Images. *Journal of Visual Communication and Image Representation*, 6(1), 1-25.

- Ohzahata, S. (1990). The Concept of "RAR" on the Naviglasses: Toward the Fusion of "Reality" and "Artificial Reality". *Hyuman, Intafesu, Shinpojumu Ronbunshu ("Human Interface")*, 6, 9-14.
- Ohzu, H., & Habara, K. (1996). Behind the Scenes of Virtual Reality: Vision and Motion. In Proceedings of the Optical Information Processing, Part 1: Image Processing and Vision, (pp. 782-798). : IEEE.
- Oishi, T., & Tachi, S. (1995). Methods to Calibrate Projection Transformation Parameters for See-Through Head-Mounted Displays. *Presence: Teleoperators and Virtual Environments*, 5(1), 122-136.
- Okapuu von Veh, A., Marceau, R. J., Malowany, A., Desbiens, P., Daigle, A., Garant, E., Gauthier, R., Shaikh, A., & Rizzi, J. C. (1996). Design and operation of a virtual reality operator-training system. *IEEE Transactions on Power Systems*, 11(3), 1585-1591.
- Olano, M., Cohen, J., Mine, M., & Bishop, G. (1995). Combatting Rendering Latency. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 19-24). : ACM.
- Oliver, J. H., Chen, L. L., & Vanderploeg, M. J. (1993). Virtual Environment for Manufacturing Systems (Quarterly Progress Report) (ADA2631281XSP): Springfield, VA: NTIS.
- Oliver, S. (1995, January 16). Fooling the Eye. *Forbes*, 94.
- Oliver, N., Pentland, S., Berard, F., & Coutaz, J. (1996). LAFTER: Lips and Face Real Time Tracker (MIT Media Laboratory Perceptual Computing Section Technical Report No. 396): Cambridge, MA: Massachusetts Institute of Technology.
- Ong, H. T. (1995). Physical Based Toolkit for Real-Time Distributed Virtual World. Unpublished Master's, Naval Postgraduate School, Monterey, California.
- Orey, M., Trent, A., Young, J., & Sanders, M. (1993). Streamlining ICAT Development Through Off-the-Shelf Hypermedia Systems. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 219-233). : NASA.
- Ornstein, M. H. (1995). The Development of a Remotely Controlled Laparoscope Manipulator. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 263-270). Amsterdam: IOS Press.
- Orr, J. (1994). Peconomics and VR: Are We Having Fun Yet? *Virtual Reality Special Report*, 1(3), 27-32.
- Osberg, K. (1993). Virtual Reality and Education: A Look at Both Sides of the Sword (HITL Technical Report No. R-93-7): Seattle, WA: University of Washington, Human Interface Technology Lab.
- Osberg, K. (1994). Rethinking Educational Technology: A Postmodern View (HITL Technical Report R-94-4): Seattle, WA: University of Washington, Human Interface Technology Lab.
- Osberg, K. M. (1995). The Teacher's Guide to Developing Virtual Environments (HITL Special Publication, VRRV Project Support): Seattle, WA: University of Washington, Human Interface Technology Lab.
- Osberg, K. M. (1997). The Effect of Having Grade Seven Students Construct

Virtual Environments on their Comprehension of Science. In Proceedings of the 1997 AERA Conference, (pp. in press). : AERA.

Osberg, K. (1997). Spatial Cognition in the Virtual Environment (HITL Technical Publication No. R-97-18): Seattle, WA: University of Washington, College of Education, Human Interface Technology Laboratory.

Osberg, K. (1997). A Teacher's Guide to Developing Virtual Environments: VRRV Project Support (HITL Technical Publication No. R-97-17): Seattle, WA: University of Washington, Human Interface Technology Laboratory.

Osberg, K. (1997). But What's Behind Door Number 4? Ethics and Virtual Reality: A Discussion (HITL Report No. R-97-16): Seattle, WA: University of Washington, Human Interface Technology Laboratory.

Osgood, J. (1991, April). Discussing Virtual Research: An Interview with a Leading Scientist in Virtual Reality Research. CADalyst, 40-43.

Ota, D., Loftin, B., Saito, T., Lea, R., & Keller, J. (1995). Virtual reality in surgical education. Computers in Biology and Medicine, 25(2), 127-137.

Otsuka, G., Sodeyama, K., Yoshida, T., Muranaka, N., & Imanishi, S. (1996). A construction of a piano training system based on virtual reality. Transactions of the Institute of Electrical Engineers of Japan, Part C, 116-C(11), 1288-1294.

Ouh-Young, M., Beard, D. V., & Brooks, F. P., Jr. (1989). Force Display Performs Better Than Visual Display in a Simple 6-D Docking Task. In Proceedings of the SIGGRAPH 89: Implementing and Interacting with Realtime Microworlds, (pp. 5:1-5:5). : ACM SIGGRAPH.

Ouhyoung, M., & Yan, Y.-h. (1995). A Three-Dimensional Building Authoring Tool Based on Line-Drawing Understanding. Presence: Teleoperators and Virtual Environments, 5(1), 1-12.

Ouyang, S., & Maynard, D. E. (1996). Phong shading by binary interpolation. Computers and Graphics, 20(6), 839-848.

Oviatt, S., DeAngeli, A., & Kuhn, K. (1997). Integration and Synchronization of Input Modes during Multimodal Human-Computer Interaction. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 415-422). : ACM, Inc.

Oyama, E., Tsunemoto, N., Tachi, S., & Inoue, Y. (1993). Experimental Study on Remote Manipulation Using Virtual Reality. Presence: Teleoperators and Virtual Environments, 2(2), 112-124.

Oyama, H., Miyazawa, T., Aono, M., Ohbuchi, R., & Suda, S. (1995). VR Medical Support System for Cancer Patients: Cancer Edutainment VR Theater (CEVRT) and Psycho-oncological VR Therapy (POVRT). In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 433-438). Amsterdam, Netherlands: IOS Press.

Oyama, H., Nomura, K., Miyazawa, T., Aono, M., Ohbuchi, R., & Suda, S. (1995). Surgical Simulation Support System. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 439-444). Amsterdam, Netherlands: IOS Press.

Oyama, H., Wakao, F., Sekiguchi, R., & Ohmatsu, H. (1996). Virtual Reality Enhanced Surgical Conference System. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 273-279). Washington, DC: IOS Press.

Oyama, H. (1996). System Integration of VR-Simulated Surgical Support System. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 131-136). : SpringerWien.

Oyama, H., Wakao, F., & Okamura, H. (1996). Virtual Reality Support System in Palliative Medicine. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 60-63). Washington, DC: IOS Press.

Oyama, H., Wakao, F., Mishina, T., Yimeng, L., & Honjo, A. (1996). Virtual Cancer Image Data Warehouse. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 151-154). Washington, DC: IOS Press.

Padgett, M. L. (1995). Standards (Report: Current Activities in VR Standards at IEEE). *The International Journal of Virtual Reality*, 1(1), 28.

Padgett, M. L., Blade, R., Evers, J., & White, C. R. (1996). Virtual reality systems: from training simulators to intelligent VR. *Proceedings of the SPIE: The International Society for Optical Engineering*, 2878, 409-449.

Pajon, J.-L., Collenot, Y., Lhomme, X., Tsingos, N., Sillion, F., Guilloteau, P., Vuylstekev, P., Grillon, G., & David, D. (1996). Building and Exploiting Levels of Detail: An Overview and Some VRML Experiments. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium '96, (pp. 117-122). : ACM.

Paley, W. B. (1993). Immersion or Desktop Virtual Reality. *Virtual Reality Systems*, 1(1), 18-20.

Palumbo, D. B., Germain, D., & Lidwell, W. (1993). The Impact of Cognitive Task Analysis as a Knowledge Acquisition Method in Intelligent Computer Assisted Training Systems. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 40). : NASA.

Pan, Z., Shi, J., & Zhang, M. (1996). Distributed Graphics Support for Virtual Environments. *Computers & Graphics*, 20(2), 191-198.

Pandzic, I. S., Kalra, P., Thalmann, N. M., & Thalmann, D. (1994). Real-time Facial Interaction. *Displays*, 15(3), 157-163.

Pandzic, I. S., Capin, T. K., Thalmann, N. M., & Thalmann, D. (1995). VLNET: A Networked Multimedia 3D Environment with Virtual Humans. In Proceedings of the Multi-Media Modeling: Towards Information Superhighway, (pp. 21-32). : World Scientific.

Pandzic, I.-S., Capin, T. K., Magnenat-Thalmann, N., & Thalmann, D. (1996). Motor Functions in the VLNET Body-Centered Networked Virtual Environment. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 94-103). : SpringerWien.

Pandzic, I. S., Capin, T. K., Thalmann, N. M., & Thalmann, D. (1996). Towards Natural Communication in Networked Collaborative Virtual Environments. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 37-47). : Queen Mary & Westfield College.

Pang, A., & Wittenbrink, C. (1997). Collaborative 3D Visualization with CSpray. *IEEE Computer Graphics and Applications* [special issue: 3D and Multimedia on the Information Superhighway], 17(2), 32-41.

- Pankratov, M. M., & Shapshay, S. (1994). Managing and Augmenting Endoscopic Imagery. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 70-71). : SIG-Advanced Applications, Inc.
- Panos, G. (1992). Virtual Reality Sourcebook. Lakewood, CA: SophisTech Research.
- Pantelidis, V. S. (1991). Robotics in Education: An Information Guide. Metuchen, NJ: Scarecrow Press.
- Pantelidis, V. S. (1993). Virtual Reality and Education: Information Sources, .
- Pantelidis, V. S., & Boyd, R. (1993). Virtual Reality - The New Dimensions. In Proceedings of the 4th Annual Technology and Teaching Conference, (pp. 107-114). : School of Education, East Carolina University.
- Pantelidis, V. S. (1993, April). Virtual Reality in the Classroom. *Educational Technology*, 33(4), 23-27.
- Papathomas, M., Breiteneder, C., Gibbs, S., & de Mey, V. (1993). Synchronization in Virtual Worlds. In N. M. Thalmann & D. Thalman (Eds.), *Virtual Worlds and Multimedia*, (pp. 135-152). New York, NY: John Wiley and Sons.
- Pape, D. (1996). A Hardware-Independent Virtual Reality Development System. *IEEE Computer Graphics and Applications*, 16(4), 44-46.
- Papka, M. E., & Stevens, R. (1996). UbiWorld: An Environment Integrating Virtual Reality, Supercomputing and Design. In Proceedings of the Fifth IEEE International Symposium on High Performance Distributed Computing, (pp. 306-307). : IEEE Comput. Soc. Press.
- Parikh, J., & Rakinic, J. (1994). Applications of CD-Interactive Technology in Healthcare. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 165). : Aligned Management Associates.
- Park, H. K. (1992). NPSNET: Real-Time 3-D Ground-Based Vehicle Dynamics. Unpublished Master's thesis, Monterey, CA: Naval Postgraduate School.
- Park, B. (1992, July). The Cyberfactory: View of the Future. AI Expert [Virtual Reality Special Report], 59-64.
- Park, B. V. (1993). The Personal Motion Platform. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 20-25). : NASA.
- Park, O.-C., & Gittleman, S. (1995). Dynamic characteristics of mental models and dynamic visual displays. *Instructional Science*, 23(5-6), 303-320.
- Parker, D. E., & Harm, D. L. (1992). Mental Rotation: A Key to Mitigation of Motion Sickness in the Virtual Environment? *Presence: Teleoperators and Virtual Environments*, 1(3), 329-333.
- Parker, D. E., Harm, D. L., & Florer, F. L. (1993). Attitude Awareness Training: An Aid to Effective Performance in the Virtual Environment? In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 298-304). : NASA.
- Parker, D. E., Harm, D. L., & Florer, F. L. (1993). Self-Attitude Awareness Training: An Aid to Effective Performance in Microgravity and Virtual Environments? In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. unpagedinated). : NASA.

- Parr, T., & Rohaly, T. (1996). A Language for Creating and Manipulating VRML. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium '96, (pp. 123-132). : ACM.
- Parris, M., Mueller, C., Prins, J., Duggan, A., Zhou, Q., & Erikson, E. (1992). A Distributed Implementation of an N-body Virtual World Simulation (TR-92-020): Chapel Hill, NC: Dept. of Computer Science, University of North Carolina.
- Parsons, D. M., Cabral, J. E., Jr., Kim, Y., & Frank, M. S. (1995). A Multimedia Workstation for Regional Telemedicine. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 274-282). Amsterdam: IOS Press.
- Parvin, B., Taylor, J., Crowley, B., Wu, L., Johnston, W., Owen, D., Okeefe, M. A., & Dahmen, U. (1996). Telepresence for In-Situ Microscopy. In Proceedings of the International Conference on Multimedia Computing and Systems, (pp. 481-487). : IEEE Computer Society Press.
- Pasman, W., Smets, G. J. F., & Stappers, P. J. (1997). Effects of Image Quality, Number of Selectable Viewpoints, and Way to Select the Viewpoint in X-Ray Luggage Inspection. Presence: Teleoperators and Virtual Environments, 6(3), 268-281.
- Pate, A. (1995). Interactive World Building in CAD, Part II: Texture Mapping and Lighting Important in Virtual Worlds. VR World, 3(4), 40.
- Pate, A. (1995). Interactive World Building in CAD, Part I: Polygon Count and Geometry Influence VR Performance. VR World, 3(3), 63.
- Patel, M., & McAllister, D. F. (1992). Combining Motion Blur and Stereo. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 71-82). : SPIE.
- Patrick, N. J. M., Sheridan, T. B., Massimino, M. J., & Marcus, B. A. (1991). Design and Testing of a Nonreactive, Fingertip, Tactile Display for Interaction with Remote Environments. In Proceedings of the Cooperative Intelligent Robotics in Space, (pp. 215-222). : SPIE.
- Pausch, R. (1991). Virtual Reality on \$5 a Day. In Proceedings of the CHI '91, Human Factors in Computing Systems: Reaching Through Technology, (pp. 265-270). : ACM.
- Pausch, P., Crea, T., & Conway, M. (1992). A Literature Survey for Virtual Environments: Military Flight Simulator Visual Systems and Simulator Sickness. Presence: Teleoperators and Virtual Environments, 1(3), 344-363.
- Pausch, P., Shackelford, M. A., & Proffitt, D. (1993). A User Study Comparing Head-Mounted and Stationary Displays. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 41-45). : IEEE Society Press.
- Pausch, R. (1993). Three views of virtual reality: an overview. Computer, 26(2), 79-80.
- Pausch, R. (1994). Alice: A Rapid Prototyping System for Virtual Reality. In Proceedings of the ACM SIGGRAPH 1994, (pp. 5:1-5:6). : ACM.
- Pausch, R. (1994). Software Development Environments and Architectures for Virtual Reality. In Proceedings of the ACM SIGGRAPH, (pp. 6:1-6:18). : ACM.
- Pausch, R., & Bryson, S. (1994). Interface Methods in Virtual Reality. In Proceedings of the ACM SIGGRAPH 1994, (pp. 5:1-5:17). : ACM.
- Pavlopoulos, S., Dembeyiotis, S., & Koutsouris, D. (1996). An Augmented Reality System for Health Care Provision via Telematics Support. In M. K. S., H. M.

Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 286-288). Washington, DC: IOS Press.

Payer, A. F., & Voss, J. M. (1993). Development of Virtual Environments for Medical Education and Training. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 69). : NASA.

Pease, J. (1993, July 22/29). Virtual Reality Dives to the Murky Depths. *The Engineer*, 28.

Peercy, M. S., Zhu, B. M., & Baum, D. R. (1995). Interactive Full Spectral Rendering. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 67-68). : ACM.

Peifer, J. (1994). Virtual Environment for Eye Surgery Simulation. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 166-173). : Aligned Management Associates.

Peifer, J. W., Curtis, W. D., & Sinclair, M. J. (1996). Applied Virtual Reality for Simulation of Endoscopic Retrograde Cholangio-Pancreatography (ERCP). In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 36-42). Washington, DC: IOS Press.

Peine, W. J., Kontarinis, D. A., & Howe, R. D. (1995). A Tactile Sensing and Display System for Surgical Applications. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 283-288). Amsterdam: IOS Press.

Pelachaud, C., & Prevost, S. (1995). Coordinating Vocal and Visual Parameters for 3D Virtual Agents. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 99-106). New York, NY: SpringerWien.

Peli, E. (1990). Visual Issues in the Use of a Head-Mounted Monocular Display. *Optical Engineering*, 29(8), 883-892.

Pendleton, B. (1994, March). Toward Real Standards in Virtual Reality. *PCVR Magazine*(14), 26-34.

Pentland, A. P. (1990). Computational Complexity versus Simulated Environments. In Proceedings of the 1990 Symposium on Interactive 3D Graphics, (pp. 185-192). : ACM.

Pentland, A., Essa, I., Friedmann, M., Horowitz, B., Slaroff, S., & Starner, T. (1990). The ThingWorld Modeling System. In Proceedings of the Algorithms and Parallel VLSI Architectures, (pp. 425-434). : Elsevier.

Pentland, A. (1995). Machine Understanding of Human Action. In Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing, (pp. 110-119). : ATR International.

Pepper, R. L., Spain, E. H., & Cole, R. E. (1986). Design Issues in Teleoperator Vision Systems. In Proceedings of the Advances in Display Technologies, (pp. 36-40). : SPIE.

Pepper, R. L., & Kaomea, P. K. (1988). Teleoperation: Telepresence and Performance Assessment. In Proceedings of the International Symposium of Teleoperation and Control, (pp. 227-234). : IFS Publications.

Perez, R. S., Johnson, J. F., & Emery, C. D. (1995). Instructional design expertise: A cognitive model of design. *Instructional Science*, 23(5-6), 321-349.

- Perkins, A. B. (1994, July). Placing Your Technology Bets on the Table: Roger McNamee. *The Red Herring*(12), 52-59.
- Peroche, B. (1993). Some Developments about Ray Tracing. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 199-212). New York, NY: John Wiley and Sons.
- Perry, C. E., Buhrman, J. R., & Knox, F. S. (1993). Biodynamic Testing of Helmet Mounted Systems. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting, *Designing for Diversity*, (pp. 79-83). : Human Factors Society.
- Perry, T. S. (1994). The Media Event. *IEEE Spectrum*, 31(1), 21.
- Persons, D. (1993, September). I'm Rubber and You're Glue. *AI Expert [Virtual Reality '93: Fall Special Report]*, 55-61.
- Petelin, J. B., & Chernoff, W. L. (1994). Computer Assisted Surgical Instrument Control. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 170-173). : Aligned Management Associates.
- Peters, D. (1991). Chasing the Eye: An Eye-Tracking Display for the Simulation Industry - The How and the Why. In Proceedings of the SID International Symposium, (pp. 495-497). : Society for Information Display.
- Peterson, I. (1992, January 4). Looking-Glass Worlds: Learning to Assemble the Machinery of Illusion. *Science News*, 141, 8-15.
- Petit, M. R. (1994). The Mutant Gene and Tainted Kool-Aid Sideshow. *Leonardo*, 27(4), 293-296.
- Petta, P., & Trappl, R. (1996). On the Cognition of Synthetic Characters. In Proceedings of the Cybernetics and Systems '96, the Thirteenth European Meeting on Cybernetics and Systems Research, (pp. 1165-1170). : Austrian Society of Cybernetic Studies.
- Phillips, C. B., Badler, N., & Granieri, J. (1992). Automatic Viewing Control for 3D Direct Manipulation. In Proceedings of the 1992 Symposium on Interactive 3D Graphics, (pp. 71-74). : ACM.
- Piantanida, T. P., & Larimer, J. (1989). The Impact of Boundaries on Color: Stabilized Image Studies. *Journal of Imaging Technology*, 15(2), 58-63.
- Piantanida, T. P., Boman, D., Larimer, J., Gille, J., & Reed, C. (1992). Studies of the Field-of-View/Resolution Tradeoff in Virtual Reality Systems. In Proceedings of the Human Vision, Visual Processing and Digital Display III, (pp. 448-456). : SPIE.
- Piantanida, T. (1993). Another Look at HMD Safety. *CyberEdge Journal*, 3(6), 9-12.
- Piantanida, T., Boman, D. K., & Gille, J. (1993). Human Perceptual Issues and Virtual Reality. *Virtual Reality Systems*, 1(1), 43-52.
- Piantanida, T. (1994). What is "Real Time," "Real Space"? *Virtual Reality Systems*, 1(3), 68-70.
- Pieper, S., Rosen, J., & Zeltzer, D. (1992). Interactive Graphics for Plastic Surgery: A Task-Level Analysis and Implementation. In Proceedings of the 1992 Symposium on Interactive 3D Graphics, (pp. 127-134). : ACM.
- Pieper, S., McKenna, M., Chen, D., & McDowell, I. (1994). Computer Animation for Minimally Invasive Surgery: Computer System Requirements and Preferred

Implementations. In Proceedings of the Stereoscopic Display and Virtual Reality Systems: The Engineering Reality of Virtual Reality, (pp. 401-408). : SPIE.

Piguet, L., Fong, T., Hine, B., Hontalas, P., & Nygren, E. (1995). VEV: A Virtual Reality Tool for Robotic Planetary Exploration. In Proceedings of the Virtual Reality World '95, (pp. 263-274). : IDG Conferences and Seminars.

Pilcher, M., Orasche, G., Andrews, K., Grossman, E., & McCahill. (1996). VRweb: A Multi-Protocol VRML Browser. In Proceedings of the Virtual Reality Modeling Language (VRML) Symposium '96, (pp. 77-86). : ACM.

Pimentel, K., & Blau, B. (1992). System Architecture Issues Related to Multiple-User VR Systems: Teaching Your System to Share. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 125-134). : Meckler Publishing.

Pimentel, K., & Teixeira, K. (1993). Virtual Reality: Through the New Looking Glass. New York, NY: Intel/Windcrest/McGraw Hill.

Pimentel, K., & Blau, B. (1994). Teaching Your System to Share. IEEE Computer Graphics and Applications, 14(1), 60-65.

Pinhanez, C. S., Mase, K., & Bobick, A. (1997). Interval Scripts: a Design Paradigm for Story-Based Interactive Systems. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 287-294). : ACM, Inc.

Pique, M., & Coogan, A. (1990). An Inexpensive Driver for Stereo Videogame Glasses. In Proceedings of the Stereoscopic Displays and Applications, (pp. 164-167). : SPIE.

Pitts, G., Robinson, M., & Strange, S. (1993). A Microbased Shared Virtual World Prototype. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 70-74). : NASA.

Platt, P. A., Dahn, D. A., & Amburn, P. (1991). Low-cost approaches to virtual flight simulation. In Proceedings of the NAECON1991: National Aerospace and Electronics Conference, (pp. 940-946). : IEEE.

Plimpton, J. (1992). Virtual Reality in Japan. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 180-189). : Meckler.

Ploder, O., Wagner, A., Enislidis, G., Truppe, M., & Ewers, R. (1995). 3D Endoscopic Surgery. In H. Lemke (Ed.), Computer Assisted Radiology, (pp. 1066-1068). Berlin, Germany: Springer.

Polinchock, D. B., & Lange, J. G. (1993). VR: A New Marketing Tool. Virtual Reality Systems, 1(1), 67-68.

Polis, M. F., Gifford, S. J., & McKeown, D. M. (1995). Automating the Construction of Large-Scale Virtual Worlds. Computer, 29(7), 57-65.

Pongratz, H. W. (1995). X-31 helmet mounted display virtual adversary symbology development and simulation. In Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements II, (pp. 272-280). : SPIE.

Pont, P. (1994). Applied Virtual Reality. In Proceedings of the Virtual Reality '94: Anwendungen und Trends, (pp. 27-38). : Springer-Verlag.

Pope, G. T. (1992, September). The Beam in Your Eye: Virtual Retinal Scanner. Discover, 26.

Pope, S. T., & Fahlen, L. E. (1993). The Use of 3-D Audio in a Synthetic Environment: An Aural Renderer for a Distributed Virtual Reality System. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 176-182). : IEEE.

Porter, S. (1992). Interview: Jaron Lanier. Computer Graphics World [Special Report: Virtual Reality], 15(4), 61-63.

Porter, B., & Souther, A. (1993). Improving the Explanation Abilities of Tutoring Systems. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 328-337). : NASA.

Porter-McLaurin, A., Jones, E. R., & Lorin-Mason, J., Jr. (1990). Three-Dimensional Endoscopy Through Alternating-Frame Technology. In Proceedings of the Stereoscopic Displays and Applications, (pp. 307-311). : SPIE.

Post, D. L. (1993). A New Color Display for HMDs. Insight: The Visual Performance Technical Group Newsletter, 15(3), 8-10.

Poston, T., & Serra, L. (1994). The Medical Reality Sculptor. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 174-176). : Aligned Management Associates.

Poston, T., & Serra, L. (1994). The Virtual Workbench: Dextrous VR. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 111-122). : World Scientific Publishing Co, Inc.

Poston, T., L., S., Solaiyappan, M., & Heng, P. A. (1996). The Graphics Demands of Virtual Medicine. Computers & Graphics, 20(1), 61-68.

Poston, T. L., & Serra, L. (1996). Dextrous Virtual Work. Communications of the ACM [special issue: Virtual Reality Software and Technology], 39(5), 37-45.

Poston, T., Nowinski, W. L., Serra, L., Chua, B.-C., Hern, N., & Pillay, P. K. (1996). The Brain Bench: virtual stereotaxis for rapid neurosurgery planning and training. In Proceedings of the VBC '96: Visualization in Biomedical Computing, 4th International Conference, (pp. 491- 500). : Springer-Verlag.

Potter, C., Brady, R., Carragher, B., Gregory, C., Kisseberth, N., Lindquist, J., Lyding, J., & Moran, P. (1996). EVAC: A Virtual Environment for Control of Remote Imaging Instrumentation. IEEE Computer Graphics and Applications, 16(4), 62-66.

Pouliquen, D. (1994). Integrating Several Operators in a Synthetic Environment: a Real Time Technique for a Realistic Behaviour. In Proceedings of the Oria 94: From Telepresence Towards Virtual Reality, (pp. 149-151). : Inst. Int. Robotique & Intelligence Artificielle Marseille.

Pouliquen, D. (1995). A Virtual Reality Software on the Way for the Ultimate in Graphics Rendering and Real Time Performances. In Proceedings of the Virtual Reality World '95, (pp. 245-250). : IDG Conferences and Seminars.

Pountain, D. (1996). VR Meets Reality. Byte, 21(7), 93-94, 96, 98.

Poupyrev, I., Billinghurst, M., Weghorst, S., & Ichikawa, T. (1996). The Go-Go Interaction Technique: Non-linear Mapping for Direct Manipulation in VR. In Proceedings of the UIST '96: the Ninth Annual ACM Symposium on User Interface Software and Technology, (pp. 79-80). : ACM SIGGRAPH.

Powers, D. A., & Darrow, M. (1994). Special education and virtual reality: challenges and possibilities. *Journal of Research on Computing in Education*, 27(1), 111-121.

Pralong, D., & Carlile, S. (1996). Generation and Validation of Virtual Auditory Space. In S. Carlile (Ed.), *Virtual Auditory Space: Generation and Applications*, (pp. 109-152). New York, NY: Chapman & Hall.

Pratt, D. (1992). NPSNET: A Networked Vehicle Simulation with Hierarchical Data Structures. In *Proceedings of the 1992 IMAGE Conference VI*, (pp. 214-216). : IMAGE Society.

Pratt, D. R. (1993). A Characterization of Virtual World and Artificial Reality Systems. Unpublished Doctoral Dissertation, Naval Postgraduate School, Monterey, California.

Pratt, D. R., Walter, J. C., Warren, P. T., & Zyda, M. J. (1993). NPSNET: JANUS-3D Providing Three-Dimensional Displays for a Two-Dimensional Combat Model. In *Proceedings of the Fourth Annual Conference: AI, Simulation, and Planning in High Autonomy Systems [Theme, Integrating Virtual Reality and Model-Based Environments]*, (pp. 31-37). : IEEE Computer Society Press.

Pratt, D. R., Barham, P. T., Lock, J., Zyda, M. J., Eastman, B., Moore, T., Biggers, K., Douglass, R., Jacobsen, S., Hollick, M., Granieri, J., Hyeongseok, K., & Badler, N. I. (1994). Insertion of an Articulated Human into a Networked Virtual Environment. In *Proceedings of the Fifth Annual Conference on AI, Simulation and Planning in High Autonomy Systems*, (pp. 84-90). : IEEE Computer Society Press.

Pratt, D. R., Locke, J., Barham, P., & Falby, J. (1995). NPSNET: Four User Interface Paradigms for Entity Control in a Virtual World. *Journal of Intelligent Systems*, 5(2-4), 89-109.

Pratt, D. R., Zyda, M., & Kelleher, K. (1995). Virtual Reality: In the Mind of the Beholder. *IEEE Computer*, 28(7), 17-19.

Pratt, D. R., & Johnson, M. A. (1995). Constructive and virtual model linkage. In *Proceedings of the 1995 Winter Simulation Conference*, (pp. 1222-1228). : IEEE.

Pratt, S., Pratt, D. R., Ohman, D., & Galloway, J. (1996). Soldier Station: Integrating Constructive & Virtual Models. In *Proceedings of the 6th Workshop on Computer Generated Forces & Behavioral Representation*, (pp. unpaginated). : Naval Postgraduate School.

Preising, B., Hsia, T. C., & Mittelstadt, B. (1991). A Literature Review: Robots in Medicine. *Engineering in Medicine and Biology*, 10(1), 13-22.

Preminger, G. M. (1994). Advanced Imaging Technologies for Endoscopic Surgery. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 177-178). : Aligned Management Associates.

Preminger, F. M., Babayan, R. J., Merril, G. L., Raju, R., Millman, A., & Merril, J. R. (1996). Virtual Reality Surgical Simulation in Endoscopic Urologic Surgery. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 157-163). Washington, DC: IOS Press.

Prince, J., Summer, S. K., & Long , M. (1994). Dimensional Visualization - Applications for Healthcare and Education. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 179-181). : Aligned Management Associates.

Proffitt, D. (1994). Human Factors in Virtual Reality Development. In Proceedings of the ACM SIGGRAPH 1994, (pp. 2:1-2:23). : ACM.

Proffitt, D. R., Bhalla, M., Gossweiler, R., & Midgett, J. (1995). Perceiving geographical slant. *Psychonomic Bulletin & Review*, 2(4), 409-428.

Prokesch, S. E. (1993). Mastering Chaos at the High-Tech Frontier: An Interview with Silicon Graphic's Ed McCracken. *Harvard Business Review*, 71(6), 135-144.

Prothero, J. (1993). Medicine and Virtual Environments (HITL Technical Report): Seattle, WA: Human Interface Technology Laboratory, University of Washington.

Prothero, J. (1993). The Treatment of Akinesia Using Virtual Images. Unpublished Unpublished Master's Thesis.

Prothero, J. D., Hoffman, H. G., Parker, D. E., Furness, T. A., & Wells, M. J. (1995). Foreground/Background Manipulations Affect Presence. In Proceedings of the Human Factors and Ergonomics Society, (pp. 1400-1404). : Human Factors and Ergonomics Society.

Prussog, A., Muhlbach, L., & Bocker, M. (1994). Telepresence in Videocommunications. In Proceedings of the Human Factors and Ergonomics Society, 38th Annual Meeting, (pp. 180-184). : Human Factors & Ergonomics Society.

Pryor, M. D., & Larsen, J. (1993). Virtual Instrument Technology. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 179). : NASA.

Psotka, J. (1993). Virtual Egocenters as a Function of Display Geometric Field of View and Eye Station Point. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 277-284). : NASA.

Psotka, J., & Davison, S. (1993). Cognitive Factors Associated with Immersion in Virtual Environments. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 285-297). : NASA.

Psotka, J. (1995). Immersive Training Systems: Virtual Reality and Education and Training. *Instructional Science*, 23(5-6), 405-431.

Psotka, J., & Davison, S. (1996). Virtual Reality Terms, .

Pugnetti, L., Mendozzi, L., Motta, A., Cattaneo, A., Barbieri, E., Brancotti, A., & Cazzullo, C. L. (1995). Immersive virtual reality to assist retraining of acquired cognitive deficits: first results with a dedicated system. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare: Medicine meets Virtual Reality III*, (pp. 289-297). Amsterdam, Netherlands: IOS Press.

Pugnetti, L., Mendozzi, L., Motta, A., Cattaneo, A., Barbieri, E., & Brancotti, A. (1995). Evaluation and retraining of adults' cognitive impairments: which role for virtual reality technology? *Computers in Biology and Medicine*, 25(2), 213-227.

Pulkka, A. (1995). Spatial Culling of Interpersonal Communications within Large-Scale Multi-User Environments. Unpublished Master's, University of Washington, Department of Computer Science and Engineering.

Pullen, J. M., & Wood, D. C. (1995). Networking Technology and DIS. *Proceedings of the IEEE*, 83(8), 1156-1167.

Puttre, M. (1991). Virtual Reality Comes into Focus. *Mechanical Engineering*, 113(4), 56-59.

Puttre, M. (1993, August). Teeing Off Indoors: Virtual Golf. *Mechanical Engineering*, 56-57.

Puzone, R., Cervone, E., Raposio, E., & Andreucci, L. (1995). Project and development of a virtual reality microsurgical simulator. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare: Medicine meets Virtual Reality III*, (pp. 455-456). Amsterdam, Netherlands: IOS Press.

Pycock, J., & Bowers, J. (1996). Getting Others to Get It Right: An Ethnography of Design Work in the Fashion Industry. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

Queau, P. (1993). Televirtuality: The Merging of Telecommunications and Virtual Reality. *Computers and Graphics*, 17(6), 691-693.

Queau, P. (1993). Televirtuality: The merging of telecommunication and virtual reality. *Computers and Graphics*, 17(6), 691-692.

Queau, P. (1995). Real Time Image Processing and Real Time Image Rendering for Televirtuality Application. In Proceedings of the Virtual Reality World '95, (pp. 227-230). : IDG Conferences and Seminars.

Quek, F. K. H. (1994). Towards a Vision-Based Hand Gesture Interface. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 17-32). : World Scientific Publishing Co, Inc.

Quesada, A. (1993, July). Seeing Inside - Exploring New Ways of Learning with Virtual Reality. *Multimedia Reporter*, 1,4,6.

Quinio, P. (1992). A Random Set Approach to 3D Scene Reconstruction by Stereoscopic Vision. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 61-70). : SPIE.

Quinlan, S. (1994). Efficient distance computation between non-convex objects. In Proceedings of the 1994 IEEE International Conference on Robotics and Automation, (pp. 3324-3329). : IEEE Computer Society Press.

Rabinowitz, W. M., Maxwell, J., Shao, Y., & Wei, M. (1993). Sound Localization Cues for a Magnified Head: Implications from Sound Diffraction about a Rigid Sphere. *Presence: Teleoperators and Virtual Environments*, 2(2), 125-129.

Rabinowitz, W. M., Maxwell, J., Shao, Y., & Wei, M. (1993). Sound Localization Cues for a Magnified Head: Implications from Sound Diffraction about a Rigid Sphere. *Presence: Teleoperators and Virtual Environments*, 2(2), 125-129.

Radai, Y. (1996). Computer art from the Mandelbrot set. *Computers and Graphics*, 20(6), 925-926.

Rader, C., Brand, C., & Lewis, C. (1997). Degrees of comprehension: Children's Understanding of a Visual Programming Environment. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 351-358). : ACM, Inc.

Radermacher, K., Bliem, R., Hennecke, C., Staudte, H. W., & Rau, G. (1996). A Desktop Image Processing System for Computer-Assisted Orthopedic Surgery (DISOS). In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 675-680). Washington, DC: IOS Press.

Radermacher, K., von Pichler, K. C., Erbse, S., Boeckmann, W., Rau, G., Jakse, G., & Staudte, H.-W. (1996). Using Human Factor Analysis and VR Simulation Techniques for the Optimization of the Surgical Worksysterm. In S. J. Weghorst, J. B.

- Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 532-541). Washington, DC: IOS Press.
- Rafnel, K. J. (1994). Visual Perception in Virtual Environments. In Proceedings of the Human Factors and Ergonomics Society, 38th Annual Meeting, (pp. 235-239). : Human Factors and Ergonomics Society.
- Ramachandran, V. S. (1995). Anosognosia in parietal lobe syndrome. *Consciousness & Cognition: An International Journal*, 4(1), 22-51.
- Ramanathan, S., Rangan, P. V., & Vin, H. M. (1992). Integrating Virtual Reality, Tele-Conferencing, and Entertainment into Multimedia Home Computers. *IEEE Transactions on Consumer Electronics*, 38(2), 70-75.
- Ramstein, C. (1996). Combining Haptic and Braille Technologies: Design Issues and Pilot Study. In Proceedings of the Assets '96: the Second Annual ACM Conference on Assistive Technologies, (pp. 37-44). : ACM SIGGRAPH.
- Randall, J. P. (1992). The Emerging Potential of Virtual Reality in Postsecondary Education. *New Directions for Teaching and Learning [special issue - Teaching in the Information Age: The Role of Educational Technology]*(51), 71-81.
- Rao, R., Russell, D. M., & Mackinlay, J. D. (1993). System Components for Embedded Information Retrieval from Multiple Disparate Information Sources. In Proceedings of the UIST '93 - The Sixth Annual Symposium on User Interface Software and Technology, (pp. 23-33). : ACM Press.
- Raposio, E., Fato, M., Berrino, P., Puzone, R., Di Somma, C., Beltrame, F., & Sani, P. L. (1996). Three-Dimensional Computer-Assisted Design of Plastic Reconstructive Surgery Procedures. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 134-138). Washington, DC: IOS Press.
- Raposio, E., DiSomma, C., Fato, M., Schenone, A., Andreucci, L., Beltrame, F., & Santi, P. (1996). An "Augmented-Reality" Aid for Plastic and Reconstructive Surgeons. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 232-236). Washington, DC: IOS Press.
- Rappin, N., Guzdial, M., Realff, M., & Ludovice, P. (1997). Balancing Usability and Learning in an Interface. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 479-486). : ACM, Inc.
- Rastogi, A., Milgram, P., Drascic, D., & Grodski, J. J. (1996). Telerobotic Control with Stereoscopic Augmented Reality. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 115-122). : SPIE.
- Rauschenbach, U. (1996). Supporting Awareness in Shared Workspaces Using Relevance-dependent Event Notifications. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Ray, D. M., & Van Chau, M. N. (1994). Virtual Environment Application with Partial Gravity Simulation. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 114-124). : NASA.
- Rea, P. (1993). Innovative Network Structure Displays. In Proceedings of the VR '93, Virtual Reality '93: Third Annual Conference on Virtual Reality, (pp. 126-133). : Meckler Publishing.

Rea, P., & Whalley, S. (1993). Advanced Interface into Network Management Workstations. In Proceedings of the IEE Colloquium on 'Distributed Virtual Reality', (pp. 7/1- 7/3). : IEE.

Rea, P. (1994). Innovative Network Structure Displays. *Virtual Reality World*, 2(1), 18-22.

Reale, R. A., Chen, J., Hind, J. E., & Brugge, J. F. (1996). An Implementation of Virtual Acoustic Space for Neurophysiological Studies of Directional Hearing. In S. Carlile (Ed.), *Virtual Auditory Space: Generation and Applications*, (pp. 153-184). New York, NY: Chapman & Hall.

Reaney, M. (1995). Virtual Reality On Stage. *VR World*, 3(3), 28-31.

Rebensburg, K., Hetzer, D., Jonas, K., Kaul, M., & Schafer, J. (1995). Distributing Virtual Worlds in a Teleteaching Environment. In Proceedings of the Fifth IEEE Computer Society Workshop on Future Trends of Distributed Computing Systems, (pp. 66- 75). : IEEE Computer Society Press.

Rebo, R. K., & Amburn, P. (1989). A Helmet-Mounted Virtual Environment Display System. In Proceedings of the Helmet-Mounted Displays, (pp. 80-84). : SPIE.

Reddy, N. P., Songe, G.-J., & Sukthankar, S. (1994). Tissue Squeezing and Cutting in the VR Environment. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 120-121). : SIG-Advanced Applications, Inc.

Reddy, M. (1995). A Survey of Level of Detail Support in Current Virtual Reality Solutions. *Virtual Reality: Research, Development, and Applications*, 1(2), 95-98.

Reed, D. A., Scullin, W. H., Elford, C. L., & Lamm, S. E. (1995). Virtual Reality for Real-Time Performance Analysis and Display. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.

Reeve, J., & Bullivent, D. (1996). Virtual Oncology Centre. *BJHC&IM: British Journal of Healthcare Computing & Information Management*, 13(7), 41-42.

Regan, M., & Pose, R. (1993). An Interactive Graphics Display Architecture. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 293-299). : IEEE Service Center.

Regan, E. C., & Price, K. R. (1993). Some Side-Effects of Immersion Virtual Reality. *VR News*, 2(6), 10-12.

Regan, M., & Pose, R. (1994). Priority Rendering With A Virtual Reality Address Recalculation Pipeline. In Proceedings of the SIGGRAPH 94, (pp. 155-162). : ACM SIGGRAPH.

Regan, M., & Pose, R. (1994). Virtual Reality and Telerobotics Applications of an Address Recalculation Pipeline. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 31-36). : NASA.

Regan, E. C., & Price, K. R. (1994). The Frequency of Occurrence and Severity of Side-Effects of Immersion Virtual Reality. *Aviation, Space, and Environmental Medicine*, 65, 527-530.

Regian, J. W., Shebilske, W. L., & Monk, J. M. (1992). Virtual reality: An instructional medium for visual-spatial tasks. *Journal of Communication*, 42(4), 136-149.

Regian, J. W., Shebilske, W. L., & Monk, J. M. (1993). A preliminary empirical evaluation of Virtual Reality as a training tool for visual-spatial tasks (USAF AMRL Technical Report AL-TR-1993-0004): Brooks Air Force Base, TX : Armstrong Lab Human Resources Directorate, Technical Training Research Division.

- Reiche, C. (1996). PIXEL: Experiences with the Element. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 681-689). Washington, DC: IOS Press.
- Reichlen, B. A. (1993). Sparcchair: A One Hundred Million Pixel Display. In Proceedings of the IEEE Virtual Reality Annual International Symposium, VRAIS '93, (pp. 300-307). : IEEE Service Center.
- Reinhart, W. F. (1992). Gray-scale Requirements for Anti-Aliasing of Stereoscopic Graphic Imagery. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 90-100). : SPIE.
- Reinhart, W. F., & Lloyd, C. J. C. (1994). A Human Factors Simulation Tool For Stereoscopic Displays. In Proceedings of the Human Factors and Ergonomics Society, 38th Annual Meeting, (pp. 1295-1299). : Human Factors and Ergonomics Society.
- Reinig, K. D., Rush, C. G., Pelster, H. L., Spitzer, V. M., & Heath, J. A. (1996). Real-Time Visually and Haptically Accurate Surgical Simulation. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 542-545). Washington, DC: IOS Press.
- Reinig, K. D., Spitzer, V. M., Pelster, H. L., Johnson, T. B., & Mahalik, T. J. (1996). More Real-Time Visual and Haptic Interaction with Anatomical Data. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 155-158). Washington, DC: IOS Press.
- Reino, A. J., Lawson, W., Garcia, B. J., & Greenstein, R. J. (1994). 3-Dimensional Video Imaging for Endoscopic Sinus Surgery and Diagnosis. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 35-51). : SIG-Advanced Applications, Inc.
- Reising, J. M., & Mazur, K. M. (1990). 3-D Displays for Cockpits: Where They Payoff. In Proceedings of the Stereoscopic Displays and Applications, (pp. 35-43). : SPIE.
- Reising, J. M., Liggett, K. K., Rate, C., & Hartsock, D. C. (1992). 3D Target Designation Using Two Control Devices and an Aiding Technique. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 146-154). : SPIE.
- Rekimoto, J. (1995). A Vision-Based Head Tracker for Fish Tank Virtual Reality - VR without Head Gear. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 94-100). : IEEE Computer Society Press.
- Renze, K. J., & Oliver, J. H. (1996). Generalized Surface and Volume Decimation for Unstructured Tessellated Domains. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 111-122). : IEEE Computer Society Press.
- Renze, K. J., & Oliver, J. H. (1996). Generalized Unstructured Decimation. *IEEE Computer Graphics and Applications*, 16(6), 24-32.
- Research, C. (1994, March). Thermal Feedback. *PCVR Magazine*(14), 14-18.
- Resnick, M. (1991). MultiLogo: A Study of Children and Concurrent Programming. *Interactive Learning Environments*, 1(3), 153-170.
- Resnick, M. (1991). Xylophones, Hamsters, and Fireworks: The Role of Diversity in Constructionist Activities. In I. Harel & S. Papert (Eds.), *Constructionism*, . Norwood, MA: Ablex Publishing.

- Resnick, M. (1993). Behavior Construction Kits. *Communications of the ACM*, 36(7), 64-71.
- Resnick, M. (1994). Turtles, Termites, and Traffic Jams: Explorations in Massively Parallel Microworlds. Cambridge, MA: MIT Press.
- Resnick, M. (1994). Learning About Life. *Artificial Life Journal*, 1(1-2), 229-241.
- Resnick, M. (1995). New Paradigms for Computing, New Paradigms for Thinking. In A. diSessa, C. Hoyles, & R. Noss (Eds.), *Computers and Exploratory Learning*, (pp. 31-43). Berlin, Germany: Springer-Verlag.
- Resnick, M. (1996). Beyond the Centralized Mindset. *Journal of the Learning Sciences*, 5(1), 1-22.
- Resnick, M., Martin, F., Sargent, R., & Silverman, S. (1996). Programmable Bricks: Toys to Think With. *IBM Systems Journal*, 35(3-4), 443-452.
- Resnick, M., & Rusk, N. (1996). The Computer Clubhouse: Preparing for Life in a Digital World. *IBM Systems Journal*, 35(3-4), 431-440.
- Resnick, M., Bruckman, A., & Martin, F. (1996). Pianos Not Stereos: Creating Computational Construction Kits. *Interactions*, 3(6).
- Reveaux, T. (1995). QuickTime VR. *VR World*, 3(4), 32-33.
- Reveaux, T. (1995). Virtual Virtuosity in Digital Paint. *VR World*, 3(3), 50-52.
- Reynders, J. V. W., Cummings, J. C., Tholburn, M., Atlas, S. R., Banerjee, S., Srikant, M., Hinker, P. J., Humphrey, W. F., Karmesin, S. R., & Keahey, K. (1995). POOMA_Parallel Object-Oriented Methods and Applications. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.
- Reynders, J. V. W., Cummings, J. C., Tholburn, M., Hinker, P. J., Atlas, S. R., Banerjee, S., Srikant, M., Humphrey, W. F., Karmesin, S. R., & Keahey, K. (1996). POOMA: A Framework for Scientific Simulation on Parallel Architectures. In Proceedings of the First International Workshop on High-Level Programming Models and Supportive Environments, (pp. 41-49). : IEEE Computer Society Press.
- Rezzonico, S., Boulic, R., Huang, Z., Thalmann, N. M., & Thalmann, D. (1995). Consistent Grasping in Virtual Environments Based on the Interactive Grasping Automata. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 107-118). New York, NY: SpringerWien.
- Rheingold, H. (1991). *Virtual Reality: Exploring the Brave New Technologies*. New York, NY: Simon and Schuster Trade.
- Rheingold, H. (1993). The Virtual Community: Homesteading on the Electronic Frontier. Reading, MA: Addison-Wesley.
- Rheingold, H. (1993). Total Immersion: Douglas Trumbull's Big Budget VR. *WIRED*, 1(5), 66-67.
- Ribarsky, W. (1994). Visualization and Analysis Using Virtual Reality. *IEEE Computer Graphics and Applications*, 14(1), 10-12.
- Rich, C., Waters, R. C., Strohecker, C., Schabes, Y., Freeman, W. T., Golding, A. R., & Roth, M. (1994). A Prototype Interactive Environment for Collaboration and Learning (Technical TR94-06): Mitsubishi Electric Research Laboratories.
- Rich, C., Waters, R. C., & Strohecker, C. (1994, December). Demonstration of an Interactive Multimedia Environment. *Computer*, 15-22.

Rich, C. J., & Braun, C. C. (1996). Assessing the Impact of Control and Sensory Compatibility on Sickness in Virtual Environments. In Proceedings of the Human Factors and Ergonomics Society, 40th Annual Meeting, (pp. 1122-1125). : HFES.

Rich, C., & Sidner, C. L. (1996). Adding a Collaborative Agent to Graphical User Interfaces. In Proceedings of the UIST '96: the Ninth Annual ACM Symposium on User Interface Software and Technology, (pp. 21-30). : ACM SIGGRAPH.

Richard, P., & Coiffet, P. (1995). Human Perceptual Issues in Virtual Environments: Sensory Substitution and Information Redundancy. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 301-306). : IEEE.

Richard, P., Birebent, G., Coiffet, P., Burdea, G., Gomez, D., & Langrana, N. (1995). Effect of Frame Rate and Force Feedback on Virtual Object Manipulation. Presence: Teleoperators and Virtual Environments, 5(1), 95-108.

Richards, C., Korba, L., Shaw, C., & Green, M. (1994). Virtual Reality and Virtual Bodies. In Proceedings of the Stereoscopic Display and Virtual Reality Systems: The Engineering Reality of Virtual Reality, (pp. 386-396). : SPIE.

Richardson, A. E., Burton, R. P., & Barrett, W. A. (1990). Sculptbox: A Volumetric Environment for Interactive Design of Three-Dimensional Objects. In Proceedings of the Stereoscopic Displays and Applications, (pp. 198-209). : SPIE.

Richert-Boe, P. (1993, September). Virtual Reality in Education. AI Expert [Virtual Reality '93: Fall Special Report], 15-19.

Riess, T., & Weghorst, S. (1995). Augmented Reality in the Treatment of Parkinson's Disease. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 298-302). Amsterdam: IOSPress.

Rifkin, N., Cate, H., & Watkins, A. (1993). ICAT and the NASA Technology Transfer Process. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 260). : NASA.

Rinalducci, E. J. (1996). Characteristics of Visual Fidelity in the Virtual Environment. Presence: Teleoperators and Virtual Environments, 5(3), 330-345.

Rinalducci, E. J., Mapes, D., Cinq-Mars, S. G., & Higgins, K. E. (1996). Determining the Field of View in HMDs: A Psychophysical Method. Presence: Teleoperators and Virtual Environments, 5(3), 353-356.

Riner, R. D., & Clodius, J. A. (1995). Simulating Future Histories: The NAU Solar System Simulation and Mars Settlement. Anthropology and Education Quarterly, 26(1), 95-104.

Risch, J., May, R., Thomas, J., & Dowson, S. (1996). Interactive Information Visualization for Exploratory Intelligence Data Analysis. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 230-238). : IEEE Computer Society Press.

Risch, J. S., May, R. A., Dawson, S. T., & Thomas, J. J. (1996). A Virtual Environment for Multimedia Intelligence Data Analysis. IEEE Computer Graphics and Applications, 16(6), 33-41.

Ritchey, K. J. (1989). Telepresence Systems--Display System Optics. In Proceedings of the Display System Optics, (pp. 71-84). : SPIE.

- Ritchey, K. J. (1992). Image-Based Panoramic Virtual Reality System. In Proceedings of the Visual Data Interpretation, (pp. 2-14). : SPIE.
- Rittger, K. (1995). Emergency Medicine Internetwork. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 303-308). Amsterdam: IOS Press.
- Riva, G. (1996). Virtual Reality and Body Image: New Perspectives for Eating Disorders. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 726). Washington, DC: IOS Press.
- Riva, G., Bolzoni, M., & Melis, L. (1996). Psychological Effects of Immersive Virtual Reality on Body Representations [poster]. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Riva, G. (1996). Virtual reality and body experience: A new approach to the treatment of eating disorders. International Journal of Virtual Reality, 2(2), 9-16.
- Riva, G., Bolzoni, M., Carella, F., Galimberti, C., Griffin, M. J., Lewis, C. H., Luongo, R., Mardegan, P., Melis, L., Molinari-Tosatti, L., Poerschmann, C., Rovetta, A., Rushton, S., Selis, C., & Wann, J. (1996). Virtual Reality Environments for Psycho-Neuro-Physiological Assessment and Rehabilitation. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 34-45). Washington, DC: IOS Press.
- Riva, G. (1997). The virtual environment for body-image modification (VEBIM): Development and preliminary evaluation. Presence: Teleoperators and Virtual Environments, 6(1), 106-117.
- Rivera, G. (1994). Proyecto Xochicalco: A Networked Virtual Environments System Featuring an Ancient Aztec/Mayan Ball Game Played on the Replicated Virtual Site of Xochicalco, Mexico. In Proceedings of the SIGGRAPH '94, (pp. 192-193). : ACM SIGGRAPH.
- Rix, J., Haas, S., & Teixeira, J. (1995). Virtual Prototyping: Virtual Environments and the Product Design Process. London, UK: Chapman Hall.
- Rizzo, A. A., & Buckwalter, J. G. (1996). The Status of Virtual Reality for the Cognitive Rehabilitation of Persons with Neurological Disorders and Acquired Brain Injury. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 22-33). Washington, DC: IOS Press.
- Robb, R. A., & Cameron, B. (1995). Virtual Reality Assisted Surgery Program. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 309-321). Amsterdam: IOS Press.
- Robb, R. A., Hanson, D. P., & Camp, J. J. (1996). Computer-Aided Surgery Planning and Rehearsal at Mayo Clinic. Computer, 29(1), 39-47.
- Robb, R. A. (1996). Virtual Endoscopy: Evaluation Using the Visible Human Datasets and Comparison with Real Endoscopy in Patients. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 195-206). Washington, DC: IOS Press.
- Robert, I. (1992). Psychological and Pedagogical Issues in Using Virtual Reality Systems. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 65-68). : Meckler Publishing.

Roberts, D. J., Griffin, M. P., & Mitchell, R. J. (1993). LOKI-2: An Architecture for Distributed Virtual Reality. In Proceedings of the IEE Colloquium on 'Distributed Virtual Reality', (pp. 8/1-5). : IEE.

Robertson, B. (1992). TELEMAN: Progress during the first year. *Mechatronics*, 2(4), 329-345.

Robertson, G. G. (1993). Information Visualization Using 3D Interactive Animation. In Proceedings of the Eurographics '93, (pp. C: 513). : North-Holland.

Robertson, G. G., & Mackinlay, J. D. (1993). The Document Lens. In Proceedings of the UIST '93: The Sixth Annual Symposium on User Interface Software and Technology, (pp. 101-108). : ACM Press.

Robertson, G. G., Card, S. K., & Mackinlay, J. D. (1993). Information Visualization Using 3D Interactive Graphics. *Communications of the ACM*, 36(4), 56-71.

Robertson, G. G., Card, S. K., & Mackinlay, J. D. (1993). Three Views of Virtual Reality. *Computer*, 26(2), 81, 83.

Robertson, B. (1993). Rendering in the '90's. *Computer Graphics World*, 16(10), 28-34.

Robertson, B., & Tolley, B. (1994). TELEMAN: the European community R&D programme on tele-operated robotic systems for the nuclear industry-a status report. In Proceedings of the Oria 94: From Telepresence Towards Virtual Reality, (pp. 5-20). : Inst. Int. Robotique & Intelligence Artificielle Marseille.

Robinett, W. (1991, September). Electronic Expansion of Human Perception. *Whole Earth Review*(72), 16-22.

Robinett, W. (1992). Synthetic Experience: A Proposed Taxonomy. *Presence: Teleoperators and Virtual Environments*, 1(2), 229-247.

Robinett, W., & Rolland, J. P. (1992). A Computational Model for the Stereoscopic Optics of a Head-Mounted Display. *Presence: Teleoperators and Virtual Environments*, 1(1), 45-62.

Robinett, W., & Holloway, R. (1992). Implementation of Flying, Scaling and Grabbing in Virtual Worlds. In Proceedings of the Symposium on Interactive 3-D Graphics, (pp. 189-192). : ACM.

Robinett, W., & Naimark, M. (1992). Artists Explore Virtual Reality: The Bioapparatus Residency at the Banff Centre for the Arts. *Presence: Teleoperators and Virtual Environments*, 1(2), 248-250.

Robinett, W. (1992). Synthetic Experience. In Proceedings of the State of the Art in Computer Graphics, Aspects of Visualization, (pp. 177-194). : Springer-Verlag.

Robinett, W., & Holloway, R. (1994). Implementation of Flying, Scaling, and Grabbing in Virtual Worlds. In Proceedings of the SIGGRAPH 1994, (pp. C:1-C:4). : ACM SIGGRAPH.

Robinett, W. (1994). Interactivity and Individual Viewpoint in Shared Virtual Worlds: The Big Screen vs. Networked Personal Displays. *Computer Graphics*, 28(2), 127-130.

Robinett, W., & Holloway, R. (1995). The Visual Display Transformation for Virtual Reality. *Presence: Teleoperators and Virtual Environments*, 4(1), 1-23.

- Robinette, K. M. (1993). Fit Testing as a Helmet Development Tool. In Proceedings of the Human Factors and Ergonomics Society, 37th Annual Meeting: Designing for Diversity, (pp. 69-73). : Human Factors Society.
- Rockwell, R. (1996). Infrastructure and Architecture for Cyberspace Communities. Computer Graphics [Focus: "Real" Virtual Reality], 30(4), 19-24.
- Rodrigues, C. C., & Pavlosky, K. M. (1995). An industrial application of telepresence technology: productivity improvements in material handling tasks. In Proceedings of the 1995 IEEE International Conference on Systems, Man and Cybernetics: Intelligent Systems for the 21st Century, (pp. 2115-2120). : IEEE.
- Roehl, B. (1995). The Logitech 3D mouse. VR World, 3(2), 68-69.
- Roehl, B. (1995). Hardware Review: the InWorld CyberWand. VR World, 3(4), 92-93.
- Roehl, B. (1995). The Fifth Dimension Glove: The 5th Glove within Reach of Low-End VR Developer. VR World, 3(3), 64-65.
- Roehl, B. (1995). The Virtual I/O "i-glasses!" HMD. VR World, 3(3), 66-67.
- Roehl, B. (1996). Distributed Virtual Reality - An Overview. In Proceedings of the 1995 Symposium on Virtual Reality Modeling Language (VRML '95), (pp. 39-43). : ACM.
- Roesli, J. (1994). Free-Field Spatialized Aural Cues for Synthetic Environments. Unpublished Master of Science, Monterey, CA: Naval Postgraduate School.
- Rogoff, B. (1994). Developing Understanding of the Idea of Communities of Learners. Mind, Culture, and Activity, 1(4), 209-229.
- Rohlf, J., & J., H. (1994). IRIS Performer: A High Performance Multiprocessing Toolkit for Real-Time 3D Graphics. In Proceedings of the SIGGRAPH '94, (pp. 381-394). : ACM.
- Rohling, R. N., & Hollerbach, J. M. (1993). Calibrating the Human Hand for Haptic Interfaces. Presence: Teleoperators and Virtual Environments, 2(4), 281-296.
- Rohling, R. N., Hollerbach, J. M., & Jacobsen, S. C. (1993). Optimized Fingertip Mapping: A General Algorithm for Robotic Hand Operators. Presence: Teleoperators and Virtual Environments, 2(3), 203-220.
- Rokita, P. (1996). Generating Depth-of-Field Effects in Virtual Reality Applications. IEEE Computer Graphics and Applications, 16(2), 18-21.
- Rolincik, M., Lauriente, M., Koons, H. C., & Gorney, D. (1993). An Intelligent Computer-Aided Tutoring System for Diagnosing Anomalies of Spacecraft in Operation. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 418). : NASA.
- Rolland, J. P., Ariely, D., & Gibson, W. (1995). Towards Quantifying Depth and Size Perception in Virtual Environments. Presence: Teleoperators and Virtual Environments, 4(1), 24-49.
- Rolland, J. P., Biocca, F. A., Barlow, T., & Kancherla, A. (1995). Quantification of Adaptation to Virtual-Eye Location in See-Thru Head-Mounted Displays. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 56-66). : IEEE Computer Society Press.
- Rolland, J. P., Wright, D. L., & Kancherla, A. R. (1996). Towards a Novel Augmented-Reality Tool to Visualize Dynamic 3-D Anatomy. In M. K. S., H. M.

Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 337-348). Washington, DC: IOS Press.

Rolland, J. (1997). Fundamentals of Optics in Virtual Environments. In Proceedings of the IEEE VRAIS '97: Virtual Collaborative Environments, (pp. unpaginated). : IEEE.

Ronell, A. (1993). The Test Drive. *Architecture New York*, 1(3), 26-29.

Roscoe, S. N. (1991). The eyes prefer real images. In S. R. Ellis (Ed.), *Pictorial Communication in Virtual and Real Environments*, (pp. 577-585). London, UK: Taylor & Francis.

Rose, A. (1992). Access for persons with disabilities through hypermedia and virtual reality. In Proceedings of the Seventh Annual Conference: 'Technology and Persons with Disabilities', (pp. 437-441). : California State University.

Rose, H. (1995). Assessing Learning in VR: Towards Developing a Paradigm. *Virtual Reality Roving Vehicles (VRRV) Project (HITL Publication TR-95-1)*: Seattle, WA: Human Interface Technology Laboratory.

Rose, H., & Billinghurst, M. (1995). *Zengo Sayu: An Immersive Educational Environment for Learning Japanese* (HITL Report No. R-95-4): Seattle, WA: University of Washington, Human Interface Technology Laboratory.

Rose, H. (1996). Design and Construction of a Virtual Environment for Japanese Language Instruction. Unpublished Unpublished Masters thesis, Seattle, WA: University of Washington.

Rose, F. D., Johnson, D. A., & Attree, E. A. (1996). Nervous system correlates of virtual reality experience. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.

Rosen, J. M. (1992). Surgical Simulation: From Flight Simulation to Virtual Reality. In Proceedings of the Virtual Worlds: Real Challenges, SRI's 1991 Conference on Virtual Reality, (pp. 43-50). : Meckler Publishing.

Rosen, J. (1994). The Role of Telemedicine and Telepresence in Reducing Health Care Costs. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 187-194). : Aligned Management Associates.

Rosen, J. M. (1994). Virtual Reality and Surgery: From Simulation to Performing Complex Procedures. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 98-100). : SIG-Advanced Applications, Inc.

Rosen, J. M. (1996). Virtual Reality and Medicine: From Training Systems to Performance Machines. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 5-13). : IEEE Computer Society Press.

Rosen, J. M., Soltanian, H., Laub, D. R., Mecinski, A., & Dean, W. K. (1996). The Evolution of Virtual Reality from Surgical Training to the Development of a Simulator for Health Care Delivery: A Review. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 89-99). Washington, DC: IOS Press.

Rosen, J. M., Laub, D. R., Jr., Pieper, S. D., Mecinski, A. M., Soltanian, H., McKenna, M. A., Chen, D., Delp, S. L., Loan, J. P., & Basdogan, C. (1996). Virtual reality and medicine: from training systems to performance machines. In Proceedings of the

IEEE 1996 Virtual Reality Annual International Symposium, (pp. 5-13). : IEEE Computer Society Press.

Rosenberg, L. B. (1993). The Effect of Interocular Distance upon Operator Performance using Stereoscopic Displays to Perform Virtual Depth Tasks. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 27-33). : IEEE Service Center.

Rosenberg, L. B. (1993). Virtual Fixtures: Perceptual Tools for Telerobotic Manipulation. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 76-82). : IEEE Service Center.

Rosenberg, L. B., & Adelstein, B. D. (1993). Perceptual Decomposition of Virtual Haptic Surfaces. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 46-53). : IEEE Society Press.

Rosenberg, L. B. (1994). The Virtual Laparoscopic Interface. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 136-138). : SIG-Advanced Applications, Inc.

Rosenberg, L. B. (1994). Medical Applications of Virtual Reality. *Virtual Reality Systems*, 1(3), 48-50.

Rosenberg, L. B. (1995). Human Interface Hardware for Virtual Laparoscopic Surgery. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 322-325). Amsterdam: IOS Press.

Rosenberg, L. B. (1995). How to Assess the Quality of Force-Feedback Systems. *Journal of Medicine and Virtual Reality*, 1(1), 12-15.

Rosenberg, L. B., & Brave, S. (1996). Use of Force Feedback to Enhance Graphical User Interfaces. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 243-248). : SPIE.

Rosenberg, L. B., & Stredney, D. (1996). A Haptic Interface for Virtual Simulation of Endoscopic Surgery. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 371-387). Washington, DC: IOS Press.

Rosenblum, L. J., Bryson, S., & Feiner, S. K. (1995). Virtual Reality Unbound. *IEEE Computer Graphics and Applications*, 15(5), 19-21.

Rosenblum, L. J. (1995). Automating Virtual Reality. *IEEE Computer Graphics and Applications*, 15(1), 9-11.

Rosenblum, L., Stansfield, S., & Zyda, M. (1996). On Apples, Oranges, and the Interdisciplinary Nature of VR. *IEEE Computer Graphics and Applications*, 16(6), 20-23.

Rosenblum, L., Durbin, J., Obeysekare, U., Sibert, L., Tate, D., Templeman, J., Agrawal, J., Fasulo, D., Meyer, T., Newton, G., Shalev, A., & King, T. (1996). Shipboard VR: from damage control to design. *IEEE Computer Graphics and Applications*, 16(6), 10-13.

Rosenman, J., Sailer, S. L., Sherouse, G. W., Chaney, E., & Tepper, J. E. (1991). Virtual Simulation: Initial Clinical Results. *International Journal of Radiation Oncology, Biology, Physics*, 20(4), 843-851.

Rosenman, J., & Cullip, T. (1992). High-Performance Computing in Radiation Cancer Treatment. *Critical Reviews in Biomedical Engineering*, 20(5-6), 391-402.

- Rosenman, J. G., Chaney, E. L., Cullip, T. J., Symon, J. R., Chi, V. L., Fuchs, H., & Stevenson, D. S. (1993). VISTAnet: Interactive Real-time Calculation and Display of 3-Dimensional Radiation Dose: An Application Of Gigabit Networking. *International Journal of Radiation Oncology, Biology, Physics*, 25(1), 123-129.
- Ross, W. A., & Aukstakalnis, S. (1993). Virtual Reality: Implications for Research in Engineering Design Graphics. *Engineering Design Graphics Journal*, 57(2), 5-12.
- Rosse, C. (1995). The potential of computerized representations of anatomy in the training of health care providers. *Academic Medicine*, 70(6), 499-505.
- Rosser, J. (1996). CD-ROM multimedia - The step before virtual reality. *Surgical Endoscopy*, 10(10), 1033-1035.
- Rossiter, D., Baciu, G., & Horner, A. (1995). An Investigation into the Modelling of Virtual Objects with Sound Vibration Properties. *Virtual Reality: Research, Development, and Applications*, 1(2), 117-121.
- Roth, A. (1991). Virtual Reality. *Spang Robinson Report - AI Research*, 7(6), 13-14.
- Rothbaum, B. O., Hodges, L. F., Kooper, R., Opdyke, D., Williford, J. S., & North, M. (1995). Effectiveness of Computer-Generated (Virtual Reality) Graded Exposure in the Treatment of Acrophobia. *American Journal of Psychiatry*, 152(4), 626-628.
- Rothbaum, B. O., Hodges, L. F., Kooper, R., Opdyke, D., Williford, J., & North, M. M. (1995). Virtual reality graded exposure in the treatment of acrophobia: a case report. *Behavior Therapy*, 26, 547-554.
- Rothbaum, B. O., Hodges, L. F., Watson, B. A., Kessler, G. D., & Opdyke, D. (1996). Virtual reality exposure therapy in the treatment of fear of flying: a case report. *Behaviour Research and Therapy*, 43(5/6), 477-481.
- Roussos, M., Johnson, A. E., Leigh, J., Vasilakis, C. A., & Moher, T. G. (1996). Constructing Collaborative Stories Within Virtual Learning Landscapes. In Proceedings of the Euro AI-ed: European Conference on AI in Education, (pp. 129-135). : University of Leeds.
- Roux, C., Coatrieux, J. L., Dillenseger, J. L., Fishman, E. K., Loew, M., Meinzer, H. P., & Pearlman, J. D. (1994). Visualization in Medicine: VIRTUAL reality or ACTUAL reality? In Proceedings of the Visualization '94, (pp. 396-399). : IEEE Computer Society Press.
- Rovetta, A., Falcone, F., Sala, R., & Garavaldi, M. E. (1996). Telehealth in Africa. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 277-285). Washington, DC: IOS Press.
- Rovetta, A., Bejczy, A. K., & Sala, R. (1996). Telerobotic Surgery: Applications on Human Patients and Training with Virtual Reality. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 508-517). Washington, DC: IOS Press.
- Rowett, S., Dew, P. M., Saunders, S., Foster, E. J., & Leigh, C. M. (1996). A virtual science park to support enriched distance learning. In Proceedings of the IEE Colloquium on Learning at a Distance: Developments in Media Technologies, (pp. 5/1-5/3). : IEE.

Rowland, D. A., & Perrett, D. I. (1995). Manipulating Facial Appearance through Shape and Color. *IEEE Computer Graphics and Applications*, 15(5), 70-76.

Rowley, T. W. (1991). Problems of Head Mounted Display. In Proceedings of the IEE Colloquium on 'Real World Visualisation - Virtual World - Virtual Reality, (pp. 12/1-12/4). : IEE.

Roy, D. M., Panayi, M., Foulds, R., Erenshteyn, R., Harwin, W. S., & Fawcett, R. (1994). The Enhancement of Interaction for People with Severe Speech and Physical Impairment through the Computer Recognition of Gesture and Manipulation. *Presence: Teleoperators and Virtual Environments*, 3(3), 227-235.

Roy, T. M., & DeFanti, T. A. (1995). Interactive Visualization in a High Performance Computing Virtual Environment. In Proceedings of the 1995 Simulation Multiconference: High Performance Computing Symposium 1995, 'Grand Challenges in Computer Simulation', (pp. 471-476). : SCS.

Roy, T. M., Cruz-Neira, C., & DeFanti, T. A. (1995). Cosmic Worm in the Cave: Steering a High-Performance Computing Application from a Virtual Environment. *Presence: Teleoperators and Virtual Environments*, 4(2), 121-129.

Ruddle, R. A., Randall, S. J., Payne, S. J., & Jones, D. M. (1996). Navigation and Spatial Knowledge Acquisition in Large-Scale Virtual Buildings: An Experimental Comparison of Immersive and "Desk-top" Displays. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 125-134). : Queen Mary & Westfield College.

Rusch, F. R., Millar, D. S., Cimera, R. E., Shelden, D. L., Thakker, U., Chapman, D. A., Khan, Y. H., Moore, D. D., & LeBoy, J. S. (1997). Crossing Streets: A K-12 Virtual Reality Application for Understanding Knowledge Acquisition [poster paper]. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 211-212). : IEEE Computer Society Press.

Rushton, S., & Wann, J. (1993). Problems in Perception and Action in Virtual Worlds. In Proceedings of the VR'93, Virtual Reality International 93: The Third Annual Conference on Virtual Reality, (pp. 43-55). : Meckler.

Rushton, S., Mon-Williams, M., & Wann, J. (1994). Binocular Vision in a Bi-Ocular World: New Generation Head-Mounted Displays Avoid Causing Visual Deficit. *Displays*, 15(4), 255-260.

Rushton, S. K., Coles, K. L., & Wann, J. P. (1996). Virtual reality technology in the assessment and rehabilitation of unilateral visual neglect. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.

Rygol, M., Ghee, S., Naughton-Green, J., & Harvey, J. (1996). Technology for Collaborative Virtual Environments. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

Sadowsky, J., & Massof, R. W. (1994). Sensory Engineering: The Science of Synthetic Environments. *John Hopkins APL Technical Digest*, 15(2), 99-109.

Sagar, M. A., Bullivant, D., Mallinson, G. D., Hunter, P. J., & Hunter, I. W. (1994). A Virtual Environment and Model of the Eye for Surgical Simulation. In Proceedings of the SIGGRAPH 94, (pp. 205-212). : ACM SIGGRAPH.

Sahoo, K. C., & Menq, C. (1991). Localization of 3-D Objects Having Complex Sculptured Surfaces Using Tactile Sensing and Surface Description. *Journal of Engineering for Industry: Transactions of the ASME*, 113(1), 85-92.

- Sahrhage, J., Blauert, J., & Lehnert, H. (1996). Implementation of an Auditory/Tactile Virtual Environment. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 18-26). : Queen Mary & Westfield College.
- Sakas, G. (1996). Curriculum vitae - Dr. Georgios Sakas. Computers & Graphics, 20(6), 759-762.
- Salem, C., & Zhai, S. (1997). An Isometric Tongue Pointing Device. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 538-539). : ACM, Inc.
- Salisbury, K., Brock, D., Massie, T., Swarup, N., & Zilles, C. (1995). Haptic Rendering: Programming Touch Interaction with Virtual Objects. In Proceedings of the 1995 ACM Symposium on Interactive 3D Graphics, (pp. 123-130). : ACM.
- Salomon, G. (1979). Interaction of media, cognition and learning. San Francisco, CA: Jossey Bass.
- Salomon, G. (1988). Artificial intelligence in reverse: Computer tools that turn cognitive. *Journal of Educational Computing Research*(4), 123-140.
- Salomon, G., Perkins, D. N., & Globerson, T. (1991). Partners in cognition: Extending human intelligence with intelligent technologies. *Educational Researcher*(20), 2-9.
- Salzman, M. C., Dede, C., & Loftin, R. B. (1995). Learner-centered design of sensorily immersive microworlds using a virtual reality interface. In Proceedings of the AIED 95: 7th World Conference on Artificial Intelligence in Education, (pp. 554-561). : Association for Advancement of Computer Education.
- Salzman, M. C., Dede, C., McGlynn, D., & Loftin, R. B. (1996). ScienceSpace: Lessons for Designing Immersive Virtual Realities. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 89-90). : ACM.
- Sampson, J. B. (1993). Cognitive Performance of Individuals Using a Head-Mounted Display while Walking. In Proceedings of the Human Factors and Ergonomics Society, 37th Annual Meeting: Designing for Diversity, (pp. 333-337). : Human Factors Society.
- Sams, M. R. (1993). An Intelligent Foreign Language Tutor Incorporating Natural Language Processing. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 315-320). : NASA.
- Sandor, E. (1994). Virtual Photography/Phscolograms: Autostereographic Medical Hard Copy. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 22-25). : SIG-Advanced Applications, Inc.
- Sandor, E., Meyers, S., & Fron, J. (1994). PHSColograms: The Photography of Virtual Reality. *Virtual Reality Systems*, 1(3), 64-67.
- Sanso, R. M., & Thalmann, D. (1994). A Hand Control and Automatic Grasping System for Synthetic Actors. *Computer Graphics Forum*, 13(3), C/167-C/177.
- Satava, R. M. (1992). Telepresence Surgery: Medical Implications for Virtual Reality. In Proceedings of the Virtual Reality '92: VR Becomes a Business, (pp. 136-143). : Meckler Publishing.
- Satava, R. M. (1993). Surgery 2001: A Technologic Framework for the Future. *Surgical Endoscopy*, 7(2), 111-113.

- Satava, R. M. (1993). Virtual Reality Surgical Simulator: The First Steps. *Surgical Endoscopy*, 7(3), 203-205.
- Satava, R. M., & Simon, I. B. (1993). Teleoperation, telerobotics, and telepresence in surgery. *Endoscopic Surgery and Allied Technologies*, 1(3), 151-153.
- Satava, R. M. (1993, September). On the Cutting Edge: VR and Surgery. *AI Expert [Virtual Reality '93: Fall Special Report]*, 41-44.
- Satava, R. M. (1994). Force Reflection and Tactile Input for Virtual Environments. In *Proceedings of the Virtual Reality and Medicine: The Cutting Edge*, (pp. 21). : SIG-Advanced Applications, Inc.
- Satava, R. M., & Wang, Y. (1994). The Third Hand and Missing Nose: Heterogeneous Anthropomorphic Mapping for Virtual Reality. In *Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics*, (pp. 200-201). : Aligned Management Associates.
- Satava, R. M. (1994). Virtual Reality and the New World Order of Medicine. *Virtual Reality Systems*, 1(3), 6.
- Satava, R. M., & Ellis, S. R. (1994). Human interface technology - An essential tool for the modern surgeon. *Surgical Endoscopy*, 8(7), 817-820.
- Satava, R. M. (1994). Emerging medical applications of virtual reality: a surgeon's perspective. *Artificial Intelligence in Medicine*, 6(4), 281-288.
- Satava, R. M. (1995). Medicine 2001: The King is Dead. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 334-339). Amsterdam: IOS Press.
- Satava, R. M. (1995). Virtual Reality, Telesurgery, and the New World Order of Medicine. *Journal of Image Guided Surgery*, 1, 12-16.
- Satava, R. M. (1995). Telesurgery, Virtual Reality and the New World Order of Medicine. In *Proceedings of the Virtual Reality World '95*, (pp. 173-178). : IDG Conferences and Seminars.
- Satava, R. M. (1995). Medical applications of virtual reality. *Journal of Medical Systems*, 19(3), 275-280.
- Satava, R. M. (1995). Virtual reality and telepresence for military medicine. *Computers in Biology and Medicine*, 25(2), 229-236.
- Satava, R. M. (1996). Medical Virtual Reality: The Current Status of the Future. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 100-106). Washington, DC: IOS Press.
- Satava, R. M. (1996). Virtual endoscopy: diagnosis using 3-D visualization and virtual representation. *Surgical Endoscopy*, 10(2), 173-174.
- Satava, R. M. (1996). Doorway to the Future. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 5-10). Washington, DC: IOS Press.
- Satava, R. M., & Jones, S. B. (1997). Virtual environments for medical training and education. *Presence: Teleoperators and Virtual Environments*, 6(2), 139-146.

- Satava, R. M., & Robb, R. A. (1997). Virtual endoscopy: Application of 3D visualization to medical diagnosis. *Presence: Teleoperators and Virtual Environments*, 6(2), 179-197.
- Satio, T., & Loftin, R. B. (1993). Issues in Capturing and Representing Domain Knowledge and Polygonal Assignment for Virtual Environments. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 26). : NASA.
- Sauerwein, T. A., & Molino, J. A. (1993). Simulating the Replacement of Spacecraft Modules by Means of a Telerobot. In Proceedings of the Human Factors and Ergonomics Society, 37th Annual Meeting: Designing for Diversity, (pp. 43-46). : Human Factors Society.
- Saup, M. (1994). ARCHiTecture by Supreme Particles. In Proceedings of the SIGGRAPH '94, (pp. 174-175). : ACM SIGGRAPH.
- Savage, J., & Holden, A. (1992). Combination of Two Methods for Isolated Word Speech Recognition : Seattle, WA: Human Interface Technology Laboratory.
- Sayers, C. P., & Paul, R. P. (1994). An Operator Interface for Teleprogramming Employing Synthetic Fixtures. *Presence: Teleoperators and Virtual Environments*, 3(4), 309-320.
- Scaife, M., & Rogers, Y. (1996). External Cognition, Interactivity and Graphical Representations. In Proceedings of the IEE Colloquium on Thinking with Diagrams, (pp. 8/1-8/6). : IEE.
- Scaife, M., & Rogers, Y. (1996). External Cognition: How do graphical representations work? *International Journal of Human-Computer Studies*, 45, 185-213.
- Scaife, M., Rogers, Y., Aldrich, F., & Davies, M. (1997). Designing For or Designing With? Informant Design for Interactive Learning Environments. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 343-350). : ACM, Inc.
- Scaletti, C. (1994). Sound Synthesis Algorithms for Auditory Data Representation. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 223-252). : Addison-Wesley Publishing.
- Scarborough, E., Brandt, J., Rogers, S., Amburn, P., Ruck, D., & Ericson, M. (1992). A Prototype Visual and Audio Display. *Presence: Teleoperators and Virtual Environments*, 1(4), 459-467.
- Scardamalia, M., & Bereiter, C. (1994). Computer Support for Knowledge-Building Communities. *The Journal of the Learning Sciences*, 3(3), 265-283.
- Schaaf, B. E. (1994). Virtual Reality, Inc. Demonstrates MIS Viewing System. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 58-59). : SIG-Advanced Applications, Inc.
- Schaufler, G., & Sturzlinger, W. (1995). Generating Multiple Levels of Detail from Polygonal Geometry Models. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 33-41). New York, NY: SpringerWien.
- Schaufler, G. (1996). Exploiting Frame-to-Frame Coherence in a Virtual Reality System. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 95-102). : IEEE Computer Society Press.
- Schaufler, G., & Sturzlinger, W. (1996). A Three-dimensional Image Cache for Virtual Reality. *Computer Graphics Forum*, 15(3), C:227-235, C:471-472.

Schaufler, G., & Mazuryk, T. (1996). High Fidelity for Immersive Displays. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 235-236). : ACM.

Schenker, P. S., Kim, W. S., & Bejczy, A. K. (1994). Remote Robotic Operations at 3000 Miles -- Dexterous Telemanipulation with Time-Delay via Calibrated Virtual Reality Task Display. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 202). : Aligned Management Associates.

Schiano, D. J. (1996). Lessons from "LambdaMOO": A Social, Text-Based VE. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 73-75). : Queen Mary & Westfield College.

Schinagl, W., & Boltzmann, L. (1995). WIFI Interactive Information Center: A Real Cyberspace and Virtual Reality Infrastructure for Economy and Education. In Proceedings of the Virtual Reality World '95, (pp. 395-398). : IDG Conferences and Seminars.

Schlager, M. S., Mumaw, R. J., & Hoecker, D. G. (1993). Analytical Tools for Designing Virtual Environment Training Systems: Nuclear Power Plant Maintenance Applications. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 261-269). : NASA.

Schlager, M., & Schank, P. (1996). TAPPED IN: A Multi-User Virtual Environment for Teacher Professional Development and Education

Reform : Berkeley, CA: School of Education, The Virtual Classroom.

Schlick, C. (1994). A Survey of Shading and Reflectance Models. Computer Graphics Forum, 13(2), 121-131.

Schloerb, D. W. (1995). A Quantitative Measure of Telepresence. Presence: Teleoperators and Virtual Environments, 4(1), 64-80.

Schmalstieg, D., & Gervautz, M. (1996). Demand-driven Geometry Transmission for Distributed Virtual Environments. Computer Graphics Forum, 15(3), C421-C432.

Schmalstieg, D., & Gervautz, M. (1996). Implementing Gibsonian Virtual Environments. In Proceedings of the Cybernetics and Systems '96, the Thirteenth European Meeting on Cybernetics and Systems Research, (pp. 928-933). : Austrian Soc. Cybernetic Studies.

Schmalstieg, D., Gervautz, M., & Stieglecker, P. (1996). Optimizing Communication in Distributed Virtual Environments by Specialized Protocols. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 1-10). : SpringerWein.

Schmalstieg, D., Fuhrmann, A., Szalavári, Z., & Gervautz, M. (1996). "Studierstube" - An Environment for Collaboration in Augmented Reality. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

Schmalstieg, D., & Shaufler, G. (1997). Smooth Levels of Detail. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 12-19). : IEEE Computer Society Press.

Schmitt, G. (1993). Virtual Reality in Architecture. In N. M. Thalmann & D. Thalmann (Eds.), Virtual Worlds and Multimedia, (pp. 85-98). New York, NY: John Wiley and Sons.

- Schmitt, G. (1995). Virtual Reality in Architecture. In Proceedings of the Virtual Reality World '95, (pp. 113-124). : IDG Conferences and Seminars.
- Schmitt, G., Wenz, F., Kurmann, D., & van der Mark, E. (1995). Toward Virtual Reality in Architecture: Concepts and Scenarios from the Architectural Space Laboratory. *Presence: Teleoperators and Virtual Environments*, 4(3), 267-285.
- Schmitz, B. (1993, April). Virtual Reality: On the Brink of Greatness. *Computer-Aided Engineering: Computer Applications in Design, Analysis, and Manufacturing*, 26-32.
- Schmitz, B. (1996). The Value of Virtual Product Development. *Machine Design International*, 68(13), 3a, 5a, 6a, 9a.
- Schneider, S., & Cannon, R. H. (1993). Experimental object-level strategic control with cooperating manipulators. *International Journal of Robotics Research*, 12(4), 338-350.
- Schneiter, J. L., & Sheridan, T. B. (1990). An Automated Tactile Sensing Strategy for Planar Object Recognition and Localization. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 12(8), 775-786.
- Schraft, R. D., Neugebauer, J.-G., & Wapler, M. (1994). Virtual Reality for Improved Control in Endoscopic Surgery. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 233-236). : Aligned Management Associates.
- Schraft, R. D. (1995). Virtual Reality - Breaking Through in Industry. In Proceedings of the Virtual Reality World '95, (pp. 57-62). : IDG Conferences and Seminars.
- Schraft, R. D., Neugebauer, J., Flaig, T., & Dainghaus, R. (1995). A Fuzzy Controlled Rendering System for Virtual Reality Systems Compromised by Genetic Algorithms. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 22-32). New York, NY: SpringerWien.
- Schreier, E. M. (1990). The Future of Access Technology for Blind and Visually Impaired People. *Journal of Visual Impairment and Blindness*, 84(10), 520-523.
- Schroeder, R. (1993). Virtual Reality: Social Impacts and Cultural Dimensions. In Proceedings of the VR '93, Virtual Reality International 93: the Third Annual Conference on Virtual Reality, (pp. 7-14). : Meckler.
- Schroeder, R., Cleal, B., & Giles, W. (1993). Virtual reality in education: some preliminary social science perspectives. In Proceedings of the Informatique '93: 2nd International Conference on Interface to Real and Virtual Worlds, (pp. 147-158). : EC2.
- Schroeder, R. (1995). Learning from Virtual Reality Applications in Education. *Virtual Reality*, 1(1), 33-40.
- Schröder, P., & Zelzer, D. (1990). The Virtual Erector Set: Dynamic Simulation with Linear Recursive Constraint Propagation. In Proceedings of the ACM SIGGRAPH 1990 - Interactive 3-D Graphics, (pp. 23-31). : ACM.
- Schubert, R., Hohne, K. H., Pommert, A., Riemer, M., Schiemann, T., & Tiede, U. (1993). Spatial knowledge representation for visualization of human anatomy and function. In Proceedings of the IPMI'93, Information Processing in Medical Imaging: the 13th International Conference on Information Processing in Medical Imaging, (pp. 168-181). : Springer-Verlag.
- Schuller, H. (1994, January). World Render 3D. *3D Artist*(14), 14-15, 17.

- Schultz, S. W. (1993). Bringing 3-D Models to Life with 3-D Studio. In Proceedings of the 14th Annual National Computer Graphics Association, NCGA '93, Computer Graphics Solutions: Applications for Implementation, (pp. 49-57). : NCGA.
- Schwade, S. (1996 August). Painless Looking: 3-D Images Let Docs See Inside from the Outside. *Prevention*, 48(8), 48-50.
- Schwarz, G. (1996). The Rhetoric of Cyberspace and the Real Curriculum. *Journal of Curriculum and Supervision*, 12(1), 76-84.
- Scott, N. G. (1992). Virtual Reality and Disabilities. In Proceedings of the Virtual Worlds: Real Challenges - Papers from SRI's 1991 Conference on Virtual Reality, (pp. 51-54). : Meckler Publishing.
- Scriven, R. J., Gabelman, L., Lowe, R. S., Avitable, M., & Wait, R. B. (1994). The Effects of Platelet Activating Factor on Microvascular Activity in a Real Time System. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 58). : Aligned Management Associates.
- Scrivener, A. B. (1993). The Impact of Visual Programming in Medical Research. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 8). : Aligned Management.
- Scully, J. (1993). Motion Tracking: The Ascension Flock of Birds. *Virtual Reality Systems*, 1(1), 40-43.
- Seed, A., & Slater, M. (1994). A User-Defined Virtual Environment Dialogue Architecture. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 71-87). : World Scientific Publishing Co, Inc.
- Segura, J. (1994). VR Project at Germany's Fraunhofer Institutes. *Virtual Reality World*, 2(6), 30-32.
- Sekiguchi, Satake, M., Oyama, H., Wakao, F., & Moriyama, N. (1996). Stereoscopic Visualization System for Clinical Angiography. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 690-693). Washington, DC: IOS Press.
- Sellberg, M. S., & Vanderploeg, M. J. (1994). Virtual Human™: a computer graphics model for biomechanical simulations and computer-aided instruction. In Proceedings of the 16th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. *Engineering Advances: New Opportunities for Biomedical Engineers*, (pp. 329-330). : IEEE.
- Sellberg, M., Murray, D., Knapp, D., Teske, T., Lattie, K., & Vanderploeg, M. (1995). Virtual Human™: An Automated Virtual Environment for Computer-Aided Instruction and Biomechanical Analysis. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 340-348). Amsterdam: IOS Press.
- Semwal, S. K., Hightower, R., & Stansfield, S. (1996). Closed Form and Geometric Algorithms for Real-Time Control of an Avatar. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 177-185). : IEEE Computer Society Press.
- Senger, S. (1996). Incorporating Visible Human Project Data into the Undergraduate Anatomy and Physiology Curriculum. In S. Weghorst, J. B. Sieburg, &

K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 194-203). Washington, DC: IOS Press.

Serra, L., Poston, T., Nowinski, W. L., Choon, C. B., Hern, N., & Pillay, P. K. (1996). The Brain Bench Planner and Trainer for Minimal Access Surgery. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 191-192). : ACM.

Shaffer, A. (1995). Integration of Hypermedia Capability into NPSNET IV.8, a Large-Scale Real-Time Distributed Simulation System. Unpublished Master's, Naval Postgraduate School, Monterey, California.

Shah, P. J., Martinez, R., & Cooney, E. (1996). Productivity and Quality Improvements in Health Care through Airboss Mobile Messaging Services. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 583-590). Washington, DC: IOS Press.

Shapiro, M. A., & McDonald, D. G. (1992). I'm Not a Real Doctor, but I Play One in Virtual Reality: Implications of Virtual Reality for Judgments about Reality. *Journal of Communication*, 42(4), 94-114.

Shapshay, S. M., & Pankratov, M. M. (1994). Applications of VR in Endoscopic Sinus Surgery. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 68-69). : SIG-Advanced Applications, Inc.

Sharkey, P. M. (1996). Proceedings of the First European Conference on Disability, Virtual Reality and Associated Technologies [Abstracts], .

Sharkey, P. M., Sandoz, P. D., Roberts, D. J., & Cruse, R. (1996). A Single-user Perception Filter for Multi-user Collaborative Virtual Environments [poster]. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.

Sharma, R., & Molineros, J. (1996). Interactive Visualization and Augmentation of Mechanical Assembly Sequences. In Proceedings of the Graphics Interface '96, (pp. 230-237). : Canadian Information Process Society.

Sharma, R., & Molineros, J. (1997). Computer Vision-Based Augmented Reality for Guiding Manual Assembly. *Presence: Teleoperators and Virtual Environments*, 6(3), 292-317.

Shaw, C., Liang, J., Green, M., & Sun, Y. (1992). The Decoupled Simulation Model for Virtual Reality Systems. In Proceedings of the CHI '92, (pp. 321-328). : åçü.

Shaw, J. (1992). Virtual Reality: A New Medium For The Artist? In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 65-68). : Meckler Publishing.

Shaw, C., & Green, M. (1993). The MR Toolkit Peers Package and Experiment. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 463-470). : IEEE Service Center.

Shaw, C., & Green, M. (1994). Two-handed Polygonal Surface Design. In Proceedings of the UIST'94: ACM Symposium on User Interface Software and Technology, (pp. 205-212). : ACM.

Shaw, J. (1994). EVE: Extended Virtual Environment. *Virtual Reality World*, 2(3), 59-61.

- Shawver, D. M. (1997). Virtual actors and avatars in a flexible user-determined-scenario environment. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 170-177, 218). : IEEE Computer Society Press.
- Sheat, D. E., Chamberlin, G. R., Gentry, P., Leggatt, J. S., & McCartney, D. J. (1992). 3D Imaging Systems for Telecommunications Applications. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 186-192). : SPIE.
- Sheen, C. M., Collins, H. D., & Gribble, R. P. (1996). Wideband Holographic Three-Dimensional Ultrasonic Imaging of Breast and Liver Phantoms. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 461-470). Washington, DC: IOS Press.
- Shelley, D. (1994). Anatomically Accurate 3-D Data. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 92-94). : SIG-Advanced Applications, Inc.
- Shepherd, B. J. (1993). Rationale and Strategy for VR Standards. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 41-46). : IEEE Service Center.
- Sheridan, T. B. (1989). Telerobotics. *Automatica*, 25(4), 487-507.
- Sheridan, T. B. (1992). Musings on Telepresence and Virtual Presence. In Proceedings of the Virtual Worlds: Real Challenges, SRI's 1991 Conference on Virtual Reality, (pp. 55-66). : Meckler Publishing.
- Sheridan, T. B. (1992). Telerobotics, Automation, and Human Supervisory Control. Cambridge, MA: The MIT Press.
- Sheridan, T. B. (1992). Musings on Telepresence and Virtual Presence. *Presence: Teleoperators and Virtual Environments*, 1(1), 120-126.
- Sheridan, T. B. (1992). Defining Our Terms. *Presence: Teleoperators and Virtual Environments*, 1(2), 272-274.
- Sheridan, T. B. (1993). My Anxieties about Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 2(2), 141-142.
- Sheridan, T. B., & Zeltzer, D. (1993). Virtual Reality Check. *Technology Review*, 96(7), 20-28.
- Sheridan, T. B. (1996). Further Musings on the Psychophysics of Presence. *Presence: Teleoperators and Virtual Environments*, 5(2), 241-246.
- Sherman, B. (1992, March 20). Birth of a Brave New World: Using Virtual Reality in Education. *Times Educational Supplement*(3951), S3(2).
- Sherman, W. R. (1994). Virtual Devices: Tools to Remotely Develop Virtual Environments. In Proceedings of the Stereoscopic Display and Virtual Reality Systems: The Engineering Reality of Virtual Reality, (pp. 347-354). : SPIE.
- Shi, J., Zhang, A., Encarnação, J., & Göbel, M. (1993 November/December). A Modified Radiosity Algorithm for Integrated Visual and Auditory Rendering. *Computers and Graphics*, 17(6), 633-642.
- Shi, Y., & Pai, D. K. (1997). Haptic Display of Visual Images. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 188-191). : IEEE Computer Society Press.
- Shih, N. J., & Shih, W. D. (1996). Gesture modeling for architectural design. *Computers and Graphics*, 20(6), 849-862.

Shimizu, T. (1992). Relationship Between Viewing Angle of 3-D Images and Body Sway. NHK Laboratories Note(399), 1-10.

Shimizu, S., Ino, S., Sato, M. O., T., Izumi, T., Takahashi, M., & Ifukube, T. (1993). A Basic Study of a Force Display Using a Metal Hydride Actuator. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 211-215). : IEEE.

Shimizu, S. (1994). A New Method of Variable Compliance for a Force Display System Using a Metal Hybrid Actuator. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 265-270). : IEEE.

Shimoga, K. B. (1992). Perceptual Feedback Issues in Dexterous Telemanipulation: Part I: Finger Force Feedback (RAL/KBS-2-92.): Toronto, Ontario: Robotics and Automation Laboratory.

Shimoga, K. (1993). A Survey of Perpetual Feedback Issues in Dexterous Telemanipulation: Part II: Finger Touch Feedback. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 271-279). : IEEE Service Center.

Shimoga, K. B., Khosla, P. K., & Sclabassi, R. J. (1994). Teleneurosurgery: An Approach to Enhance the Dexterity of Neurosurgeons. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 203). : Aligned Management Associates.

Shimojo, M., Shinohara, M., & Fukui, Y. (1997). Shape Identification Performance and Pin-matrix Density in a 3 Dimensional Tactile Display. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 180-187). : IEEE Computer Society Press.

Shinn-Cunningham, B., & Kulkarni, A. (1996). Recent Developments in Virtual Auditory Space. In S. Carlile (Ed.), *Virtual Auditory Space: Generations and Applications*, (pp. 185-243). New York, NY: Chapman & Hall.

Shirriff, K. (1993). Fractals from Simple Polynomial Composite Functions. *Computers and Graphics*, 17(6), 701-703.

Shlechter, T. M. (1992). Computer-Based Simulation Systems and Role-Playing: An Effective Combination for Fostering Conditional Knowledge. *Journal of Computer-Based Instruction*, 19(4), 110-114.

Shlechter, T. M., & Burnside, B. L. (1996). The Virtual Training Program: Implications for Military and Civilian Educators. In Proceedings of the Annual Conference of the American Educational Research Association, (pp. unpaginated). : AERA.

Shneiderman, B. (1992). Designing the User Interface: Strategies for Effective Human Interaction (2nd ed.). Reading, MA: Addison- Wesley.

Shoates, K. B., & Moran, P. (1993). Training Augmentation Device (TAD) for the Air Force Satellite Control Network (AFSCN). In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 419-429). : NASA.

Shuttleworth, P., & Robinson, M. (1990). Three Dimensional Vision for Robot Manipulator Control. In Proceedings of the Applications of Artificial Intelligence VIII, (pp. 344-353). : SPIE.

Shuttleworth, P., Robinson, M., & Godber, S. (1990). Three Dimensional Vision for Robot Control Using Novel Stereoscopic Sensors. In Proceedings of the Close-Range Photogrammetry Meets Machine Vision, (pp. 1157-1163). : SPIE.

- Siddiqi, N., Gazzani, F., Des Jardins, J., & Chao, E. Y. S. (1996). The Use of a Robotic Device for Gait Training and Rehabilitation. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 440-449). Washington, DC: IOS Press.
- Sieburg, H. (1994). The Cybermouse Simulator for the Rational Design of Treatment Strategies. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 204-208). : Aligned Management Associates.
- Sieburg, H. B., & Rogers, J. (1996). Behavior Modification in Silico. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 727). Washington, DC: IOS Press.
- Sieburg, H. S., & Müller-Sieburg, C. (1996). The CyberMensch Simulation Server for the Planning of Clinical Trials 2.0. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 265-272). Washington, DC: IOS Press.
- Siegel, C. S. (1994). Creating 3-D Models from Medical Images Using AVS. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 169-171). : SIG-Advanced Applications, Inc.
- Siegel, M. A., & Sousa, G. A. (1994). Inventing the Virtual Textbook: Changing the Nature of Schooling. *Educational Technology*, 34(7), 49-54.
- Siegel, C. S. (1995). Creating 3D Models from Medical Images Using AVS: A User's Perspective. *Computer Graphics [Special Issue on Modular Visualization Environments (MVEs)]*, 29(2), 59-60.
- Siira, J. O., & Pai, D. K. (1996). Fast Haptic Textures. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 231-232). : ACM.
- Silzars, A. (1993). The Display Continuum. *Information Display*, 9(10), 4.
- Simiakakis, G., & Day, A. M. (1994). Five-dimensional Adaptive Subdivision for Ray Tracing. *Computer Graphics Forum*, 13(2), 133-140.
- Sims, D. (1993). Virtual Evidence on Trial. *IEEE Computer Graphics and Applications*, 13(3), 11-13.
- Sims, D. (1994). Multimedia Camp Empowers Disabled Kids. *IEEE Computer Graphics and Applications*, 14(1), 13-14.
- Simsarian, K. T., Karlsgren, J., Fahnen, L. E., Bretan, I., Frecon, E., Axling, T., Frost, N., & Jonsson, L. (1996). Achieving Virtual Presence with a Semi-Autonomous Robot Through a Multi-Reality and Speech Control Interface. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 50-63). : SpringerWien.
- Singh, S. K., Kumar, A., & Shi, L. (1993). Generating Autonomous Dynamic Behavior for Computer Animation: A Constrained Optimal Control Approach. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 422-428). : IEEE Service Center.
- Singh, S. K., Bostrom, M., Popa, D. O., & Wiley, C. W. (1993). Design of an interactive lumbar puncture simulator with tactile feedback. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 156-159). : IEEE.
- Singh, G., Serra, L., Fairchild, K., & Poston, T. (1994). Visual Creation of Virtual Design Environments and Virtual Worlds Research at ISS. *Presence: Teleoperators and Virtual Environments*, 3(1), 94-107.

Singh, G., Serra, L., Png, W., & Ng, H. (1994). BrickNet: A Software Toolkit for Network-Based Virtual Worlds. *Presence: Teleoperators and Virtual Environments*, 3(1), 19-34.

Singh, G., & Feiner, S. K. (1995). Introduction to the Special Issue on Virtual Reality Software and Technology. *ACM Transactions on Computer-Human Interaction [Special Issue on Virtual Reality Software and Technology]*, 2(3), 177-178.

Singh, G., Serra, L., Png, W., Wong, A., & Ng, H. (1995). BrickNet: Sharing Object Behaviors on the Net. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 19-27). : IEEE Computer Society Press.

Singh, K., Ohya, J., & Parent, R. (1995). Human Figure Synthesis and Animation for Virtual Space Teleconferencing. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 118-126). : IEEE Computer Society Press.

Singh, T., Zhu, M., Thakkar, U., & Ravaioli, U. (1996). Impact of World Wide Web, Java, and virtual environments on education in computational science and engineering. In Proceedings of the FIE (Frontiers in Education) '96: Technology-Based Re-Engineering. Engineering Education, (pp. 1007-1010). : IEEE.

Singh, N., & Gisi, M. A. (1996). Coordinating distributed objects with declarative interfaces. In Proceedings of the COORDINATION '96: Coordination Languages and Models, First International Conference, (pp. 368-385). : Springer-Verlag.

Singh, S. K., Pieper, S. D., Guinness, J., & Popa, D. O. (1996). Control and Coordination of Head, Eyes, and Facial Expressions of Virtual Actors in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 5(4), 402-415.

Singhai, S. K., & Cheriton, D. R. (1995). Exploiting Position History for Efficient Remote Rendering in Networked Virtual Reality. *Presence: Teleoperators and Virtual Environments*, 4(2), 169-193.

Singhal, S. K., & Cheriton, D. R. (1995). Exploiting Position History for Efficient Remote Rendering in Networked Virtual Reality. *Presence: Teleoperators and Virtual Environments*, 4(2), 169-193.

Siwoff, R. (1994). Virtual Reality and Visual Disability. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 104-107). : SIG-Advanced Applications, Inc.

Siwoff, R. (1994). DEI: Digitally Enhanced Imager. *Virtual Reality World*, 2(3), 63-65.

Siy, P., & Hu, J. E. (1993). Edge-Pixel-Based Stereo Correspondence Through Ordering-Oriented Neural Networks. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 123-131). : SPIE.

Sklaroff, S. (1994). Virtual Reality Puts Disabled Students in Touch. *Education Week*, 13(36), 8.

Skolnick, A. A. (1995). Radiologists Display Powerful New Tools. *JAMA: The Journal of the American Medical Association*, 273(4), 273-275.

Skurzynski, G. (1993, October). The Best of All (Virtual) Worlds: What Will Become of Today's New Technology? *School Library Journal*, 39(10), 37-40.

Slater, M. (1992). An Algorithm to Support 3D Interaction on Relatively Low Performance Graphics Systems. *Computers and Graphics*, 16(3), 331-335.

- Slater, M., & Usoh, M. (1993). The Influence of a Virtual Body on Presence in Immersive Virtual Environments. In Proceedings of the Third Annual Conference on Virtual Reality, VR '93, (pp. 34-42). : Meckler.
- Slater, M., & Usoh, M. (1993). Presence in Immersive Virtual Environments. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 90-96). : IEEE Service Center.
- Slater, M., & Usoh, M. (1993). Representations Systems, Perceptual Position and Presence in Immersive Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 2(3), 221-233.
- Slater, M., & Usoh, M. (1993). Virtual Environments for Architectural Walkthrough: the Issue of Presence [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.
- Slater, M., & Usoh, M. (1993). Simulating Peripheral Vision in Immersive Virtual Environments. *Computers and Graphics*, 17(6), 643-653.
- Slater, M., Usoh, M., & Steed, A. (1994). Depth of Presence in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 3(2), 130-144.
- Slater, M., Usoh, M., & Steed, A. (1994). Steps and Ladders in Virtual Reality. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 45-55). : World Scientific Publishing Co, Inc.
- Slater, M., Usoh, M., & Steed, A. (1995). Taking Steps: The Influence of a Walking Technique on Presence in Virtual Reality. *ACM Transactions on Computer-Human Interaction [Special Issue on Virtual Reality Software and Technology]*, 2(3), 201-219.
- Slater, M., Usoh, M., & Chrysanthou, Y. (1995). The Influence of Dynamic Shadows on Presence in Immersive Virtual Environments. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 8-21). New York, NY: SpringerWien.
- Slater, M., Steed, A., & Usoh, M. (1995). The Virtual Treadmill: A Naturalistic Metaphor for Navigation in Immersive Virtual Environments. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 135-148). New York, NY: SpringerWien.
- Slater, M., Usoh, M., Linakis, V., & Kooper, R. (1996). Immersion, Presence and Performance in Virtual Environments: An Experiment with Tri-Dimensional Chess. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 163-172). : ACM.
- Slater, M., Usoh, M., Benford, S., Snowdon, D., Brown, C., Rodden, T., Smith, G., & Wilbur, S. (1996). Distributed Extensible Virtual Reality Laboratory (DEVRL)-A Project for Co-operation in Multi Participant Environments. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 137-148). : SpringerWein.
- Slater, M., & Chrysanthou, Y. (1996). View Volume Culling Using a Probabilistic Caching Scheme. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 1-9). : Queen Mary & Westfield College.
- Slutski, L. (1997). Online Telecontrol Techniques Based on Object Parameter Adjusting. *Presence: Teleoperators and Virtual Environments*, 6(3), 255-267.
- Smedley, K. G., Haines, B. K., Van-Vactor, D., & Jordan, M. (1989). Digital Perspective Generation and Stereo Display of Composite Ocean Bottom and Coastal

Terrain Images. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 246-250). : SPIE.

Smeltzer, G. T. A., & Roelen, W. A. H. (1995). Virtual Reality in Architectural Design and Real Estate Simulation. In Proceedings of the Virtual Reality World '95, (pp. 99-112). : IDG Conferences and Seminars.

Smets, G. J. F., Stappers, P. J., Overbeeke, K., & van der Mast, C. (1994). Designing in Virtual Reality: Implementing Perceptual-Action Coupling with Affordances. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 97-110). : World Scientific Publishing Co, Inc.

Smets, G. J. F., & Overbeeke, K. J. (1995). Visual Resolution and Spatial Performance: The Trade-Off between Resolution and Interactivity. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 67-73). : IEEE Computer Society Press.

Smets, G. J. F., & Overbeeke, K. J. (1995). Trade-off Between Resolution and Interactivity in Spatial Task Performance. *IEEE Computer Graphics and Applications*, 15(5), 46-51.

Smit, J., Bosma, M., & van Scheltinga, J. T. (1996). Metric Volume Rendering. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 211-222). : SpringerWien.

Smith, B. (1992). The Use of Animation to Analyze and Present Information. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 190-199). : Meckler.

Smith, R. B. (1992). A prototype futuristic technology for distance education. In Proceedings of the New Directions in Educational Technology, NATO Advanced Research Workshop, (pp. 131- 138). : Springer-Verlag.

Smith, R. D. (1993). Virtual Reality Merges With Battle Simulations. *Signal*, 47(11), 52.

Smith, K. R., Frank, M. S., Bucholz, R. D., & Heilbrun, M. P. (1994). The NeuroStation - Applications to Minimally Invasive Surgery. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 209-211). : Aligned Management Associates.

Smith, S., Pickett, R. M., & Williams, M. G. (1994). Environments for Exploring Auditory Representations of Multidimensional Data. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 167-184). : Addison-Wesley Publishing Company.

Smith, R. D. (1994). Current Military Simulations and the Integration of Virtual Reality Technologies. *Virtual Reality World*, 2(2), 45-50.

Smith, R. W. (1994). Bell Atlantic's Virtual Work Force. *The Futurist: A Journal of Forecast, Trends, and Ideas about the Future*, 28(2), 13.

Smith, A., Kitamura, Y., Takemura, H., & Kishino, F. (1995). A Simple and Efficient Method for Accurate Collision Detection among Deformable Polyhedral Objects in Arbitrary Motion. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 136-147). : IEEE Computer Society Press.

- Smith, A. B. (1995). Using virtual reality for the simulation of infrared environments for human training. In Proceedings of the 33rd Annual Southeast Conference, (pp. 101-109). : ACM.
- Smith, J. R., & Grimes, R. V. (1996). Engineering Applications of Virtual Reality. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 332-339). : SPIE.
- Smith, A., Dunaway, J., Demasco, P., & Peischl, D. (1996). Multimodal Input for Computer Access and Augmentative Communication. In Proceedings of the Assets '96: the Second Annual ACM Conference on Assistive Technologies, (pp. 80-85). : ACM SIGGRAPH.
- Snell, Q. O., & Gustafson, J. L. (1995). HINT: A Way to Measure Computer Performance. In Proceedings of the Supercomputing '92, (pp. unpaginated). : ACM.
- Snoswell, M. (1994, March). Cyberterm - Part 3. PCVR Magazine(14), 20-25.
- Snow, M. D., Graham, J. A., & Yates, W. J. A. (1996). Interactive Computer Technologies in Dentistry: Virtual Reality in Orthodontics. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 411-422). Washington, DC: IOS Press.
- Snow, M. D., Graham, J. A., Yates, W. J. A., & Phillips, C. (1996). The dimensionally integrated dental patient record: digital dentistry virtual reality in orthodontics. In Proceedings of the 12th International Symposium on the Creation of Electronic Health Record System and Global Conference on Patient Cards: Toward an Electronic Patient Record '96, (pp. 299-306). : Medical Records Institute.
- Snowdon, D. N., & West, A. J. (1994). AVIARY: Design Issues for Future Large-Scale Virtual Environments. Presence: Teleoperators and Virtual Environments, 3(4), 288-308.
- Snowdon, D., & West, A. (1994). The AVIARY Distributed Virtual Environment. In Proceedings of the 2nd UK Virtual Reality VR SIG Conference, (pp. 39-54). : UK Virtual Reality Special Interest Group, Ltd.
- Snowdon, D. N. (1995). AVIARY: A Model for a General Purpose Virtual Environment. Unpublished Doctoral Dissertation, Department of Computer Science, The University of Manchester, UK.
- Snowdon, D., Benford, S., Brown, C., Ingram, R., Knox, I., & Studley, L. (1995). Information Visualization, Browsing and Sharing in Populated Information Terrains. In Proceedings of the BCS Seminar, New Directions in Software Development: the World Wide Web, (pp. 50-60). : British Computer Society.
- Snowdon, D. (1996). Body-Centered Configuration in Collaborative Virtual Environments. In Proceedings of the FIVE '96: Framework for Immersive Working Environments, the 2nd FIVE International Conference, (pp. 48-54). : Queen Mary & Westfield College.
- So, R. H. Y., & Griffin, M. J. (1995). Head-coupled Virtual Environment with Display Lag. In K. Carr & R. England (Eds.), Simulated and Virtual Realities: Elements of Perception, (pp. 103-111). London, UK: Taylor and Francis.
- Sobey, T. J. (1995). Creation of a Computer Generated Semi-Autonomous Entity Able to Function in an Amphibious Environment. Unpublished Master's, Naval Postgraduate School, Monterey, California.

- Soderberg, B., & Miller, D. (1993). Image generation design for ground-based network training environment. In Proceedings of the IEEE Virtual Reality Annual International Symposium (VRAIS), (pp. 318-329). : IEEE.
- Sokolewicz, M., Wirth, H., Bohm, K., & John, W. (1995). Using the GIVEN Toolkit for System Development in MuSE. In M. Göbel (Ed.), *Virtual Environments '95: Selected Papers of the Eurographics Workshops*, (pp. 273-289). New York, NY: SpringerWien.
- Sollenberger, R. L., & Milgram, P. (1989). Stereoscopic computer graphics for neurosurgery. In Proceedings of the Third International Conference on Human Computer Interaction: Designing and Using Human-Computer Interfaces and Knowledge Based Systems, (pp. 294-301). : Elsevier.
- Soloman, D. (1993, June). Volumetric Imaging Launches Graphics into a 3-D World. *Photonics Spectra*, 129-135.
- Soltan, P., Trias, J., Dahlke, W., Lasher, M., & McDonald, M. (1995). Laser-Based 3D Volumetric Display System: Second Generation. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 349-358). Amsterdam: IOS Press.
- Sommerer, C., & Laurent, M. (1994). A-Volve: A Real-Time Interactive Environment. In Proceedings of the SIGGRAPH '94, (pp. 172-173). : ACM SIGGRAPH.
- Song, G.-J., & Reddy, N. P. (1995). Tissue Cutting in Virtual Reality. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 359-364). Amsterdam: IOS Press.
- Songer, N. (1996). Exploring Learning Opportunities in Coordinated Network-Enhanced Classrooms: A case of kids as global scientists. *The Journal of the Learning Sciences*, 5(4), 297-327.
- Soong, D., & Norman, M. (1993). Nonlinear Interactive Motion Control Techniques for Virtual Space Navigation. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 111-117). : IEEE Service Center.
- Soong, D., & Norman, M. L. (1993). Cosmic Explorer: A Virtual Reality Environment for Exploring Cosmic Data. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 75-79). : IEEE Society Press.
- Sorensen, B. R., Donath, M., Yang, G. B., & Starr, R. C. (1989). The Minnesota Scanner: A Prototype Sensor for Three-Dimensional Tracking of Moving Body Segments. *IEEE Transactions on Robotics and Automation*, 5(4), 499-509.
- Southard, D. A., Lee, J. P., Mitchell, R. B., & Grinstein, G. G. (1993). A Virtual Environment Architecture. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 126-127). : IEEE Society Press.
- Southard, D. A. (1994). Viewing model for stereoscopic head-mounted displays. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems, (pp. 119-29). : SPIE.
- Southard, D. A. (1995). Viewing model for virtual environment displays. *Journal of Electronic Imaging*, 4(4), 413-420.
- Sowizral, H. A., & Barnes, J. C. (1993). Tracking Position and Orientation in a Large Volume. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 132-140). : IEEE Service Center.

- Sowizral, H. (1994). Optimizing Graphics for Virtual Reality. In Proceedings of the SIGGRAPH 1994, (pp. 3:1-3:12). : ACM.
- Spain, E. H. (1990). Stereo Advantage for a Peg-in-Hole Task Using a Force-Feedback Manipulator. In Proceedings of the Stereoscopic Displays and Applications, (pp. 244-254). : SPIE.
- Speeter, T. H. (1992). Transforming Human Hand Motion for Telemanipulation. Presence: Teleoperators and Virtual Environments, 1(1), 63-79.
- Speigle, J. M., & Loomis, J. M. (1993). Auditory Distance Perception by Translating Observers. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 92-99). : IEEE Society Press.
- Spiro, R. J., Feltovich, P. J., Jacobson, M. J., & Coulson, R. L. (1992). Cognitive flexibility, constructivism, and hypertext: Random access instruction for advanced knowledge acquisition in ill-structured domains. In T. M. Duffy & D. H. Jonassen (Eds.), Constructivism and the technology of instruction, . Hillsdale, NJ: Lawrence Erlbaum.
- Sprague, L. A., Bell, B., Sullivan, T., Voss, M., Payer, A. F., & Goza, S. M. (1993). Virtual reality in medical education and assessment. In Proceedings of the WNN93/FNN93: Fifth Workshop on Neural Networks: Academic/Industrial/NASA/Defense, An International Conference on Computational Intelligence - Neural Networks, Fuzzy Systems, Evolutionary Programming and Virtual Reality, (pp. 373-377). : SCS.
- Spring, M. B. (1993). The Virtual Library: Explorations in Informational Spaces. Virtual Reality World, 1(3 and 4), 53- 66.
- Spring, M. B., & Jennings, M. C. (1993). Virtual Reality and Abstract Data: Virtualizing Information. Virtual Reality World [insert in Multimedia Review], 1(1), c-m.
- Springer, J., Falter, H., & Rotting, M. (1993). Individual Differences and Limits in the Perception Spatial Representations [Abstract]. Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians, 13(4), 434-440.
- Sramek, M. (1996). Fast Ray-Tracing of Rectilinear Volume Data. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 201-210). : SpringerWien.
- Staal, P. V. D. (1993). The Scientific Crystal Ball. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 375-380). : IEEE.
- Stafford-Fraser, Q. (1996). BrightBoard: A Video-Augmented Environment. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 134-141). : ACM.
- Stampe, D., Roehl, B., & Eagan, J. (1993). Virtual Reality Creations. Corte Madera, CA: Waite Group Press.
- Stampe, D. M., & Grodski, J. J. (1994). Low cost software-based rendering and stereoscopic interfaces for teleoperation and virtual reality. In Proceedings of the Virtual Interfaces: Research and Applications, (pp. 18/1-6). : AGARD.
- Standen, P. J., & Low, H. L. (1996). Do virtual environments promote self directed activity? A study of severely learning disabled students learning Makaton sign language. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.

- Stanfel, J. (1993, March). Virtual Cities--A Regional Discovery Project. *Educational Media International*, 30(1), 42-45.
- Stanfel, J. (1994). Programming for the Virtual Commons. EMI: Educational Media International, 31(4), 242-246.
- Stanger, V. J. (1992). Telecommunications Applications of Virtual Reality. In Proceedings of the IEE Colloquium on 'Using Virtual Worlds', (pp. 7/1-3, 7/40). : IEE.
- Stanger, V. J. (1993). Networked Virtual Reality Applications. In Proceedings of the IEE Colloquium on 'Distributed Virtual Reality', (pp. 1/1-1/4). : IEE.
- Stanley, M. C., & Colgate, J. E. (1993). Real Time Simulation of Stiff Dynamic Systems via Distributed Memory Parallel Processors. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 456-462). : IEEE Service Center.
- Stanney, K. (1995). Realizing the Full Potential of Virtual Reality: Human Factors Issues That Could Stand in the Way. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 28-34). : IEEE Computer Society Press.
- Stanney, K. M., Kennedy, R. S., & Yurcik, W. (1996). Computers and Telecommunications in the Year 2000 - Virtual Environments and Intelligent Transportation Systems. In Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting, (pp. 298-302). : HFES.
- Stanney, K., & Kennedy, R. S. (1996). Human Factors Evaluation of Virtual Environments. In Proceedings of the Southcon '96, (pp. 316-321). : IEEE.
- Stanney, K. M., & Kennedy, R. S. (1997). Development and Testing of a Measure of the Kinesthetic Position Sense Used to Assess the Aftereffects from Virtual Environment Exposure. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 87-94). : IEEE Computer Society Press.
- Stansfield, S. A. (1993). A Computer-Based Training System Combining Virtual Reality and Multimedia. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 60-64). : NASA.
- Stansfield, S. A. (1994). A Distributed Virtual Reality Simulation System for Situation Training. *Presence: Teleoperators and Virtual Environments*, 3(4), 360-365.
- Stansfield, S., Miner, N., Shawver, D., & Rogers, D. (1995). An Application of Shared Virtual Reality to Situational Training. In Proceedings of the Virtual Reality Annual International Symposium '95, (pp. 156-161). : IEEE Computer Society Press.
- Stansfield, S., Shawver, D., Rogers, D., & Hightower, R. (1995). Mission visualization for planning and training. *IEEE Computer Graphics and Applications*, 15(5), 12-14.
- Stansfield, S., Shawver, D., Miner, N., & Rogers, D. (1995). An application of shared virtual reality to situational training. In Proceedings of the Virtual Reality Annual International Symposium '95 (VRAIS), (pp. 156-161). : IEEE Computer Society Press.
- Stanton, D., Wilson, P., & Foreman, N. (1996). Using virtual reality environments to aid spatial awareness in disabled children. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.
- Starks, M. (1990). Portable Low Cost Devices for Videotaping, Editing and Displaying Field Sequential Stereoscopic Motion Pictures and Video. In Proceedings of the Stereoscopic Displays and Applications, (pp. 266-271). : SPIE.

- Starks, M. (1992). Stereoscopic Video and the Quest for Virtual Reality. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 200-225). : Meckler.
- Starks, M. (1992). Stereoscopic Video and the Quest for Virtual Reality: an Annotated Bibliography of Selected Topics II. In Proceedings of the Stereoscopic Displays and Applications III, (pp. 216-227). : SPIE.
- Starks, M. R. (1993). Low-Cost Universal Stereoscopic Virtual-Reality Interfaces. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 141-146). : SPIE.
- Starks, M. (1995). Stereoscopic Image Technology: A Review of Patents and the Literature. *The International Journal of Virtual Reality: A Multimedia Publication for Professionals*, 1(2), 2-24.
- Starovic, G., Cahill, V., & Tangney, B. (1995). An Event Based Object Model For Distributed Programming. In Proceedings of the OOIS (Object Oriented Information Systems) '95, (pp. 72-86). : Springer Verlag.
- Stary, C. (1993). Task-Oriented Design of Virtual Worlds. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 97-103). : IEEE Service Center.
- State, A., Hirota, G., Chen, D. T., Garrett, W. F., & Livingston, M. A. (1996). Superior Augmented Reality Registration by Integration Landmark. In Proceedings of the SIGGRAPH 96, (pp. 429-438). : ACM.
- State, A., Livingston, M. A., Garrett, W. F., Hirota, G., Whitton, M. C., Pisano, E. D., & Fuchs, H. (1996). Technologies for Augmented Reality Systems: Realizing Ultrasound-Guided Needle Biopsies. In Proceedings of the SIGGRAPH '96, (pp. 439-446). : ACM.
- Steed, A., & Slater, M. (1994). A User-Defined Virtual Environment Dialogue Architecture. In Proceedings of the VRST '94 - Virtual Reality Software and Technology, (pp. 87-96). : World Scientific Publishing Company.
- Steed, A., & Slater, M. (1996). A Dataflow Representation for Defining Behaviors Within Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 163-168). : IEEE Computer Society Press.
- Steenblik, R. A. (1989). Chromostereoscopic Microscopy. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 60-64). : SPIE.
- Steffin, M. (1996). Computer Assisted Therapy for Multiple Sclerosis and Spinal Cord Injury Patients Application of Virtual Reality. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 64-74). Washington, DC: IOS Press.
- Steinhart, E. (1997). Leibniz's Palace of the Fates: A Seventeenth Century Virtual Reality System. *Presence: Teleoperators and Virtual Environments*, 6(1), 133-135.
- Stephenson, U. M. (1995). Auralisation in Real-Time? Some New Approaches in Room Acoustical Simulation and Auralixation. In Proceedings of the Virtual Reality World '95, (pp. 379-392). : IDG Conferences and Seminars.
- Sterling, B. (1992). War is Virtual Hell. *WIRED*, 1(1), 46-51.
- Sterman, J. D. (1994). Learning in and about complex systems. *System Dynamics Review [Special Issue: Systems thinkers, systems thinking]*, 10(2-3), 291-330.
- Steuer, J. (1992). Defining Virtual Reality: Dimension Determining Telepresence. *Journal of Communication*, 42(4), 73-94.

Stevens, R. (1994). Multimedia Supercomputing: The Use of Supercomputers to Drive High-Performance Multimedia Systems and Virtual Environments. In Proceedings of the Third IEEE International Symposium on High Performance Distributed Computing, (pp. 3). : IEEE Computer Society Press.

Stevens, R. J., & Neal, W. J. (1994). Distributed Air Traffic Management Simulation: The Next Application-Domain for DIS. In Proceedings of the 1994 Summer Computer Simulation Conference, (pp. 828-833). : Society for Computer Simulation.

Stewart, D. (1991, January). Through the Looking Glass Into an Artificial World--Via Computer. Smithsonian, 36-45.

Stewart, B. C. (1996). Mounting Human Entities to Control and Interact with Networked Ship Entities in a Virtual Environment. Unpublished Master's, Naval Postgraduate School, Monterey, California.

Stiegler, B. (1993). Developing Deterritorialization. Architecture New York, 1(3), 18-23.

Stipp, D. (1994, August 23,). 'Phantom' Simulates Wielding a Scalpel, Tossing a Ball. The Wall Street Journal, pp. B1, B6.

Stix, G. (1991). Reach Out - Touch is Added to Virtual Reality Simulations. Scientific American, 264(2), 134.

Stix, G. (1992). See-Through View: Virtual Reality May Guide Physicians' Hands. Scientific American, 267(3), 166.

Stone, R. J. (1990). Virtual Reality in Telerobotics. In Proceedings of the Computer Graphics '90, (pp. 29-39). : Blenheim On-Line.

Stone, R. J. (1991). Advanced Human-System Interfaces for Telerobotics Using Virtual Reality and Telepresence Technologies. In Proceedings of the ICAR '91, Fifth International Conference on Advanced Robotics: Robots in Unstructured Environments, (pp. 168-173). : IEEE.

Stone, R. J. (1991). The UK Virtual Reality and Telepresence Project: One Year On. In Proceedings of the Computer Graphics, Computer Animation, Virtual Reality, and Visualization, (pp. 131-140). : Blenheim On-line.

Stone, R. J. (1991). Virtual Reality and Telepresence: An Initiative Within an Initiative. In Proceedings of the IEE Colloquium on 'Advanced Robotic Initiatives in the UK', (pp. 7/1-3). : IEE.

Stone, R. J. (1991). Virtual Reality: Interfaces for the 21st Century. In Proceedings of the Advanced Information Systems: The New Technologies in Today's Business Environment, Incorporating the Sixth International Expert Systems Conference, (pp. 99-110). : Learned Information.

Stone, R. J., King, I., Dalton, G., & Weaver, I. (1991). Virtual Reality and Telepresence: Visual Worlds and Non-Visual Sensors. In Proceedings of the IEE Colloquium on 'Real World Visualization - Virtual World - Virtual Reality', (pp. 3/1-6). : IEE.

Stone, R. J. (1991). Virtual Reality and Cyberspace: From Science Fiction to Science Fact. Information Services and Use, 11(5-6), 283-300.

Stone, R. J. (1992). Virtual Reality In Perspective. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 7-13). : Meckler.

Stone, R. J. (1992). Virtual Reality: Toolkits for Robotic Telepresence. In Proceedings of the Informatique '92: International Conference Interface to Real and Virtual Worlds, (pp. 171). : EC2.

Stone, R., Dalton, G., & Connell, A. (1992). New Developments In Telepresence. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 103-116). : Meckler Publishing.

Stone, R. J. (1992). Toward Telepresence: Imaging's Answer to Virtual Reality. *Advanced Imaging*, 7(8), 29-34.

Stone, R. J. (1993). Virtual Reality: Toys or Tools of the Trade? *ASLIB Proceedings*, 45(6), 167-181.

Stone, V. E. (1993). Social Interaction and Social Development in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 2(2), 153-161.

Stone, A. R. (1993). Sex, Death, and Architecture. *Architecture New York*, 1(3), 34-39.

Stone, B., & Connell, A. (1994). The UK's Virtual Reality and Simulation Initiative: One Year Later. *Virtual Reality World*, 2(5), 50-58.

Stone, R. J. (1994). A Year in the Life of British Virtual Reality: Will the UK's Answer to Al Gore Please Stand Up?!! *Virtual Reality World*, 2(1), 48-62.

Stone, R. J., & Connell, A. P. (1995). From Technology Push to Technology Pull: Virtual Reality in the Real World. In Proceedings of the Virtual Reality World '95, (pp. 33-46). : IDG Conferences and Seminars.

Stoppi, J. (1992). Virtual and Real-Time Interactive Spatial Modelling: The Rules and Tools of Virtual Architecture and Construction. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 23-30). : Meckler Publishing.

Stoppi, J. U. L. (1992). Televirtual Environments: Concept, Applications, and Implications. *Virtual Reality Report*, 2(7), 5-12.

Storms, R. L. (1995). NPSNET: 3D Sound Server, An Effective Use of the Auditory Channel. Unpublished Master's, Naval Postgraduate School, Monterey, California.

Storms, R., Biggs, L., Cockayne, W., Barham, P., Falby, J., Brutzman, D., Zyda, M., & ", P. o., Palo Alto, California, November 4-6, 1996, pp.. (1996). The Auralization and Acoustics Laboratory. In Proceedings of the ICAD '96, International Conference on Auditory Display, (pp. unpaginated). : Addison-Wesley Publishing Co.

Strasser, A. (1993). Improved Visualization of Virtual Environments. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 14). : NASA.

Strasser, A., & Schaaf, B. E. (1994). Head-Mounted Displays in Laparoscopic Surgery. *Virtual Reality Systems*, 1(3), 60-63.

Strauch, B., Ferder, M., Goldstein, R. D., & Glicksman, A. (1995). Three-Dimensional Imaging in Microvascular Surgery. *Journal of Medicine and Virtual Reality*, 1(1), 34-35.

Stredney, D., Yagel, R., May, S., & Torello, M. (1992). Supercomputer Assisted Brain Visualization with an Extended Ray Tracer. In Proceedings of the Boston Workshop on Volume Visualization, (pp. 33-38). : ACM SIGGRAPH.

- Stredney, D. (1994). Virtual Simulations Through High Performance Computing. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 212-215). : Aligned Management Associates.
- Stredney, D., Carlson, W., Swan, E., II, & Blostein, B. (1995). The Determination of Environmental Accessibility and ADA Compliance Through Virtual Wheelchair Simulation. *Presence: Teleoperators and Virtual Environments*, 4(3), 297-305.
- Stredney, D., Sessanna, D., McDonald, J. S., Hiemenz, L., & Rosenberg, L. B. (1996). A Virtual Simulation Environment for Learning Epidural Anesthesia. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 164-175). Washington, DC: IOS Press.
- Street, R. L., Jr. , & Manning, T. (1995). Using Multimedia Computing to Help Patients Make Decisions for Treating Breast Cancer. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 365-374). Amsterdam: IOS Press.
- Strickland, D., Patel, A., Stovall, C., Palmer, J., & McAllister, D. (1994). Self-tracking of Human Motion for Virtual Reality Systems. In Proceedings of the Engineering Reality of Virtual Reality, (pp. 278-287). : SPIE.
- Strickland, D. (1995, May 15). NCSU Computer Engineer finds autistic children accept virtual reality : NCSU, Department of Education.
- Strickland, D. (1996). EEG Measurements in a Virtual Reality. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 728). Washington, DC: IOS Press.
- Strickland, D., Marcus, L. M., Mesibov, G. B., & Hogan, K. (1996). Brief report: Two case studies using virtual reality a learning tool for autistic children. *Journal of Autism and Developmental Disorders*, 26(6), 651-659.
- Strickland, D. (1996). A virtual reality application with autistic children. *Presence: Teleoperators and Virtual Environments*, 5(3), 319-329.
- Strohecker, C. (1994). The "Zircus" Concept Sketch for a Learning Environment and Online Community (Technical TR94-22): Mitsubishi Electric Research Laboratories.
- Strohecker, C. (1997). The Zircus Concept Sketch for a Learning Environment and Online Community. *Presence: Teleoperators and Virtual Environments*, 6(3), 339-349.
- Strybel, T. Z., Manligas, C. L., & Perrott, D. R. (1992). Minimum Audible Movement Angle as a Function of the Azimuth and Elevation of the Source. *Human Factors*, 34(3), 267-275.
- Stuart, R., & Thomas, J. C. (1990). Educational Applications of Cyberspace [abstract]. In Proceedings of the First Conference on Cyberspace, (pp. 96-97). : School of Architecture, The University of Texas at Austin.
- Stuart, R., & Thomas, J. C. (1991). The implications of education in cyberspace. *Multimedia Review*, 2(2), 17-27.
- Stuart, R. (1992). Virtual Auditory Worlds: An Overview. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 144-166). : Meckler Publishing.
- Stuart, R. (1992). Virtual Reality at NYNEX. In Proceedings of the Virtual Reality '93, Beyond the Vision: The Technology, Research, and Business of Virtual Reality, (pp. 226-232). : Meckler.

- Stuart, R. (1992). Virtual Reality: Directions in Research and Development. *Interactive Learning International*, 8(2), 95-100.
- Stuart, R. (1993). Creative Improvisational Design in Virtual Environments: Users as Virtuoso Collaborative World-Builders (Pace University Technical Reports #66): Pace University School of Computer Science and Information Systems.
- Stuart, R. (1993). Introduction to the special feature on aerospace and military applications. *Virtual Reality Systems: Applications, Research & Development*, 1(2), 6.
- Stuart, R. (1993). Virtual auditory worlds: an overview. In Proceedings of the VR Becomes a Business: Proceedings of Virtual Reality '92, (pp. 144-166). : Meckler Publishing.
- Stuart, R. (1996). *The Design of Virtual Environments*. New York, NY: McGraw-Hill.
- Stucki, P., & Ghezal, A. (1993). Three-Dimensional Copying Using Surface Reconstruction from Tomography Slices. In N. M. Thalmann & D. Thalmann (Eds.), *Virtual Worlds and Multimedia*, (pp. 169-178). New York, NY: John Wiley and Sons.
- Studt, T. (1993, March). Virtual Reality: From Toys to Research Tools. *R and D Magazine*, 18-22.
- Sturman, D. J., Zeltzer, D., & Pieper, S. (1989). Hands-On Interaction with Virtual Environments. In Proceedings of the UIST, ACM SIGGRAPH Symposium on User Interface Software and Technology, (pp. 19-24). : ACM.
- Sturman, D. J. (1992). Whole Hand Input. Unpublished Ph. D. Thesis, Cambridge, MA: Massachusetts Institute of Technology.
- Sturman, D. J., & Zeltzer, D. (1993). Utility of Whole-Hand Input. In Proceedings of the Telemanipulator Technology and Space Telerobotics, (pp. 282-291). : SPIE.
- Sturman, D. J., & Zeltzer, D. (1993). A Design Method For "Whole-Hand" Human-Computer Interaction. *ACM Transactions on Information Systems*, 11(3), 219-238.
- Sturman, D. (1993). Using the whole hand in the human-computer interface. In N. M. Thalmann & D. Thalmann (Eds.), *Communicating with Virtual Worlds*, (pp. 14-28). Tokyo, Japan: Springer-Verlag.
- Sturman, D. J., & Zeltzer, D. (1994). A Survey of Glove-Based Input. *IEEE Computer Graphics and Applications*, 14(1), 30-39.
- Stytz, M. R., & Frieder, O. (1992). Volume-Primitive Based Three-dimensional Medical Image Rendering: Customized Architectural Approaches. *Computers and Graphics*, 16(1), 85-100.
- Stytz, M. R., Block, E., & Soltz, B. (1993). Providing Situation Awareness Assistance to Users of Large-Scale Dynamic, Complex Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 2(4), 297-313.
- Stytz, C. M. (1994). Virtual Reality Research and Development Projects from the United States Government. *Virtual Reality World*, 2(6), 48-53.
- Stytz, M. R., & Block, E. (1994). On improving situation awareness in large-scale, distributed virtual realities used for military training. In Proceedings of the Montpellier '94: 3rd International Conference. *Interface to Real and Virtual Worlds*, (pp. 203-216). : EC2.

- Stytz, M. R., Ambrun, P., Lawlis, P. K., & Shomper, K. (1995). Virtual Environments Research in the Air Force Institute of Technology Virtual Environments, 3-D Medical Imaging, and Computer Graphics Laboratory. *Presence: Teleoperators and Virtual Environments*, 4(4), 417-430.
- Stytz, M. R., Hobbs, B., Kunz, A., Soltz, B., & Wilson, K. (1995). Portraying and Understanding Large-Scale Distributed Virtual Environments: Experience and Tentative Conclusions. *Presence: Teleoperators and Virtual Environments*, 4(2), 146-168.
- Stytz, M. R., Block, E. G., Soltz, B. B., & Wilson, K. (1996). The Synthetic Battlebridge: A Tool for Large-Scale Ves. *IEEE Computer Graphics and Applications*, 16(1), 16-25.
- Stytz, M. R. (1996). Distributed Virtual Environments. *IEEE Computer Graphics and Applications*, 16(3), 19-31.
- Stytz, M. R., Block, E. G., Soltz, B. B., & Wilson, K. (1996). The Synthetic Battlebridge: A Tool for Large-Scale VEs. *IEEE Computer Graphics and Applications*, 16(1), 16-26.
- Stytz, M. R., Garcia, B. W., Godsell-Stytz, G. M., & Banks, S. B. (1996). A Distributed Virtual Environment Prototype for Emergency Medical Procedures Training. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 473-485). Washington, DC: IOS Press.
- Su, S. A., & Furuta, R. (1993). The Virtual Panel Architecture: A 3D Gesture Framework. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 387-393). : IEEE Service Center.
- Su, A. S., & Furuta, R. (1994). A Logical Hand Device in Virtual Environments. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 33-44). : World Scientific Publishing Co, Inc.
- Su, S. A., & Furuta, R. (1994). A Specification of 3D Manipulation in Virtual Environments. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 64-70). : NASA.
- Sudarsky, O., & Gotsman, C. (1996). Output-sensitive Visibility Algorithms for Dynamic Scenes with Applications to Virtual Reality. *Computer Graphics Forum*, 15(3), C249-C258.
- Suding, R. (1993, September). Low-Cost VR for the Virtual Hacker. *AI Expert [Virtual Reality '93: Fall Special Report]*, 25-30.
- Suetens, P., Vandermuelen, D., Oosterlinck, A., Gybels, J., & Marchal, G. (1988). A 3-D Display System with Stereoscopic, Movement Parallax and Real-time Rotation Capabilities (and use in medical imaging). In Proceedings of the Medical Imaging II, (pp. 855-861). : SPIE.
- Sugawara, S., Suzuki, G., Nagashima, Y., Matasuura, M., Tanigawa, H., & Moiriuchi, M. (1994). InterSpace: Networked Virtual World for Visual Communication. *IEICE Transactions on Information and Systems*, E77-D(9), 1344-1349.
- Sugioka, Y., Tadatsu, S., Nakayama, T., Yamamoto, Y., Kobayashi, T., Takahasi, Y., Yamoka, N., Nanishi, Y., Hayasaka, T., Goto, G., Sudo, M., Kusaka, Y., Yamzaki, K., & Yamaguchi, T. (1995). A Controlled Study of the Safety Features of a Virtual Reality System for the Development of the Hyper Hospital. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 307-312). : IEEE.

- Sukthankar, S. J., & Reddy, N. P. (1994). Towards Virtual Reality of "Tissue Squeezing": A Feasibility Study. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 182-184). : Aligned Management Associates.
- Sukthankar, S. M., & Reddy, N. P. (1995). Force Feedback Issues in Minimally Invasive Surgery. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 375-379). Amsterdam: IOS Press.
- Sulzmann, A., & Baur, C. (1995). A Virtual Reality Environment for Microtelemanipulation. In Proceedings of the Virtual Reality World '95, (pp. 73-82). : IDG Conferences and Seminars.
- Sumner, T., Bonnardel, N., & Kallak, B. H. (1997). The Cognitive Ergonomics of Knowledge-Based Design Support Systems. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 83-90). : ACM, Inc.
- Sun, H. (1995). A Behavioral Test-Bug Using a DataGlove Input Device. *Virtual Reality: Research, Development, and Applications*, 1(2), 109-116.
- Sung, U., & Wohn, K. (1996). A Concurrency Control Model for the Real-time Interactive Shared Virtual Environment. In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Suprenant, T. (1991). Wilson Library Bulletin. *Libraries, Information and Virtual Reality*, 66(2), 95-136.
- Surdick, R. T., Davis, E. T., King, R. A., Corso, G. M., Shapiro, A., Hedges, L., & Elliot, K. (1994). Relevant Cues for the Visual Perception of Depth: Is Where You See It Where It Is? In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 1305-1309). : Human Factors and Ergonomics Society.
- Surles, M. C. (1992). An Algorithm With Linear Complexity for Interactive, Physically-Based Modeling of Large Proteins. In Proceedings of the SIGGRAPH '92, (pp. 221-230). : ACM.
- Surles, M. C. (1992). Techniques for Interactive Manipulation of Graphical Protein Models (TR92-016): Chapel Hill, NC: Dept. of Computer Science, University of North Carolina.
- Suryanarayanan, S., Reddy, N. P., & Gupta, V. (1996). An Intelligent System with EMG-Based Joint Angle Estimation for Telemanipulation. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 546-552). Washington, DC: IOS Press.
- Suryanarayanan, S., & Reddy, N. P. (1997). EMG-Based Interface for Position Tracking and Control in VR Environments and Teleoperation. *Presence: Teleoperators and Virtual Environments*, 6(3), 282-291.
- Sutherland, I. E. (1963). Sketchpad, A Man-Machine Graphical Communication System. In Proceedings of the AFIPS Spring Joint Computer Conference, (pp. 329-346). : American Federation of Information Processing Societies.
- Sutherland, I. E. (1965). The Ultimate Display. In Proceedings of the IFIP Congress, (pp. 506-508). : Federation of Information Processing Societies.
- Sutton, C., McCloy, R., Middlebrook, A., Chater, P., Wilson, M., & Stone, R. (1996). MIST VR, A Laparoscopic Surgery Procedures Training and Evaluator. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 598-607). Washington, DC: IOS Press.

- Suzuki, G., Sugawara, S., Watanabe, K., & Nagashima, Y. (1993). Virtual Collaborative Workspace. *NTT Review*, 5(2), 74-81.
- Suzuki, G., Sugawara, S., & Moriuchi, M. (1993). Visual Communication Environment Using Virtual Space Technology. In Proceedings of the ICAT '93, Third International Conference on Artificial Reality and Tele-Existence, (pp. 55-62). : Japan Technology Transfer Association.
- Suzuki, N., Hattori, A., Kai, S., Ezumi, T., & Takatsu, A. (1996). Surgical Planning System for Soft Tissues Using Virtual Reality. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 159-166). Washington, DC: IOS Press.
- Swartz, J. D., & Hatcher, T. (1996). Virtual Experience: The Impact of Mediated Communication in a Democratic Society. *Educational Technology*, 36(6), 40-44.
- Swedlow, T. (1995). Fusion in Cyberspace. *VR World*, 3(4), 14-15.
- Swedlow, T. (1995). ..And Without Further Ado: The Wedding! *VR World*, 3(1), 17-20.
- Swedlow, T. (1995). The L. A. VR Scene: Projects and Personas Bring VR to Entertainment Capital. *VR World*, 3(3), 40-43.
- Szabo, Z., Hunter, J. G., Berci, G., & Sackier, J. (1994). Choreographed Instrument Movements During Laparoscopic Surgery: Needle Driving, Knot Tying, and Anastomosis Techniques. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 216-217). : Aligned Management Associates.
- Szeliski, R. (1996). Video Mosaics for Virtual Environments. *IEEE Computer Graphics and Applications*, 16(2), 22-30.
- Tachi, S. (1991). Systemization and its Applications: TELE-EXISTENCE. *Journal of the Institute of Television Engineers of Japan*, 45(4), 480-487.
- Tachi, S., Arai, H., Maeda, T., Oyama, E., Tsunemoto, N., & Inoue, Y. (1991). Tele-existence in real world and virtual world. In Proceedings of the '91 ICAR: The Fifth International Conference on Advanced Robotics, Robotics in Unstructured Environments, (pp. 193-198). : IEEE.
- Tachi, S. (1993). Virtual Reality and Tele-existence: Harmonious Integration of Synthesized Worlds and the Real World. In Proceedings of the IVR '93: Industrial Virtual Reality Show and Conference, (pp. 6-16). : Reed Exhibitions Japan, Ltd.
- Tachi, S., & Yasuda, K. (1993). Evaluation Experiments of Tele-Existence Manipulation System. In Proceedings of the ICAT '93, the Third International Conference on Artificial Reality and Tele-Existence, (pp. 17-26). : Japan Technology Transfer Association.
- Tachi, S., & Yasuda, K. (1994). Evaluation Experiments of a Teleexistence Manipulation System. *Presence: Teleoperators and Virtual Environments*, 3(1), 35-44.
- Tachi, S., & Yasuda, K. (1995). Design and evaluation of tele-existence manipulation system. *Transactions of the Institute of Electrical Engineers of Japan*, Part C, 115-C(2), 172-181.
- Tachi, S. (1995). Virtual Reality as Human Tools for 3C's and 3E's. In Proceedings of the ISMCR '95: the Fourth Internaitonal Symposium on Measurement and Control in Robotics, (pp. 25-30). : Slovak Tech. Univ.

- Tait, A. (1992). Authoring Virtual Worlds On The Desktop. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 31-36). : Meckler Publishing.
- Tait, A. (1993, July). Authoring Virtual Worlds on the Desktop. *AI Expert [Virtual Reality 93 Special Report]*, 11-13.
- Taitt, H. A. (1993). Technology in the Classroom: Planning for Educational Change. *NASSP Curriculum Report*, 22(4), entire issue.
- Takacs, M. (1993). Prolix: A Text-based Participant System for VR. Unpublished Unpublished Master Thesis, Seattle, WA: College of Engineering, University of Washington.
- Takala, T., & Hahn, J. (1992). Sound Rendering. In Proceedings of the SIGGRAPH 1992, (pp. 211-219). : ACM.
- Takamune, K., Kotoko, T., & Tanie, K. (1994). A Virtual Environment Display with Constraint Feeling based on Position/Force Control Switching. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 255-260). : IEEE.
- Takeda, T., & Tsutsui, Y. (1995). On the computer simulation of ball dribble in the virtual environment. In Proceedings of the Symbiosis of Human and Artifact, the Sixth International Conference on Human-Computer Interactions, (pp. 473-478). : Elsevier.
- Takeda, T., & Tsutsui, Y. (1995). Construction of virtual environment with force display for ball dribbling. *Journal of the Institute of Television Engineers of Japan*, 49(10), 1339-1346.
- Takemura, H., Tomono, A., & Kobayashi, Y. (1990). Study of Pseudo-Workspace Using a Stereoscopic Display. In Proceedings of the Mobile Robots IV, (pp. 371-377). : SPIE.
- Takemura, H., Tomono, A., & Kishino, F. (1990). A Usability Study of the Virtual Environment. *Hyuman, Intafesu, Shinpojumu Ronbunshu ("Human Interface")*, 6, 577-582.
- Takemura, H., Kitamura, Y., Kishino, F., & Ohya, J. (1993). Distributed Processing Architecture for Virtual Space Teleconferencing System. In Proceedings of the ICAT '93, the Third International Conference on Artificial Reality and Tele-Existence, (pp. 27-32). : Japan Technology Transfer Association.
- Tambe, M., Lewis-Johnson, W., Jones, R. M., Koss, F. V., Laird, J. E., Rosenbloom, P. S., & Schwamb, K. (1995). Intelligent agents for interactive simulation environments. *AI Magazine*, 16(1), 15-39.
- Tambe, M., & Rosenbloom, P. S. (1996). Architectures for agents that track other agents in multi-agent worlds. In Proceedings of the IJCAI '95: Intelligent Agents II, Agent Theories, Architectures and Languages, (pp. 156-170). : Springer-Verlag.
- Tan, H. Z., Pang, X. D., & Durlach, N. I. (1992). Manual Resolution of Length, Force and Compliance. In Proceedings of the Winter Annual Meeting of the American Society of Mechanical Engineering, (pp. 13-18). : ASME.
- Tanir, O., & Sevine, S. (1994). Defining Requirements for a Standard Simulation Environment. *IEEE Computer*, 27(2), 28-34.
- Tanner, S. (1993). The Use of Virtual Reality at Boeing's Huntsville Laboratories. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 14-19). : IEEE Service Center.

Tanner, S., & Miller, K. (1993). The Use of High Fidelity CAD Models at the Basis for Training on Complex Systems. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 10-13). : NASA.

Tanner, T. B., Gitlow, S., Ganguli, R., Kubacka, R., Mulsant, B. H., & Epstein, B. A. (1995). Developing a Medication Information Workstation for Patients: Experience Using Digital Video-Based Multimedia Software. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 380-388). Amsterdam: IOS Press.

Tart, C. T. (1990). Multiple personality, altered states and virtual reality: The world simulation process approach. *Dissociation: Progress in the Dissociative Disorders*, 3(4), 222-233.

Tart, C. T. (1991). On the uses of computer-generated realities: A response to Begelman. *Dissociation: Progress in the Dissociative Disorders*, 4(4), 216-217.

Tate, D. L., Sibert, L., & King, T. (1997). Virtual environments for shipboard firefighting training. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 61-68, 215). : IEEE Computer Society Press.

Tatehira, Y., Yamaguchi, H., Akiyama, K., & Kobayashi, Y. (1989). Optimal Display Factors in Stereoscopic TV Images for Human Stereoscopic Vision. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 212-219). : SPIE.

Taubes, G. (1994, December). Surgery in Cyberspace. *Discover*, 84-94.

Taylor, H. (1992). Architectures for Virtual Visualization. In Proceedings of the Virtual Worlds: Real Challenges, SRI's 1991 Conference on Virtual Reality, (pp. 67-70). : Meckler.

Taylor, M. B. (1992). A Glimpse of the Virtual Future. *Cross Currents*, 19(1), 69-72.

Taylor, J., & McAllister, D. F. (1993). Interactive Manipulation of Quadric Surfaces in Stereo. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 95-106). : SPIE.

Taylor, R. M., II, Robinett, W., Chi, V. L., Brooks, F. P., Jr., Wright, W. V., Williams, R. S., & Snyder, E. J. (1993). The Nanomanipulator: A Virtual-Reality Interface for a Scanning Tunneling Microscope. In Proceedings of the SIGGRAPH '93, (pp. 127-134). : ACM.

Taylor, M. C. (1993). De-signing the Simcit. *Architecture New York*, 1(3), 10-17.

Taylor, R., & S., R. (1993). Psychology of Immersion in Virtual Worlds. *Intermedia*, 21(3), 40-41.

Taylor, G. L. (1994). The Potential Role of Virtual Reality in Environmental Education. Unpublished Unpublished Master of Science thesis, Columbus, Ohio: Ohio State University, School of Natural Resources.

Taylor, S. J. E., & Moody, S. (1995). Virtual Reality: A Distributed Perspective. *Virtual Reality: Research, Development, and Applications*, 1(2), 91-94.

Taylor, V., Chen, J., Canfield, T., Stevens, R., Reed, D., Scullin, W., & Lamm, S. (1995). Performance Monitoring of Interactive Virtual Environments for Finite Element Analysis. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.

Taylor, R., Bayliss, G., Bowyer, A., & Willis, P. (1995). A virtual workshop for design by manufacture. In Proceedings of the Computers in Engineering - 1995: the 1995 Database Symposium, (pp. 921-926). : ASME.

Taylor, V. E., Chen, J., Huang, M., Canfield, T., & Stevens, R. (1996). Identifying and Reducing Critical Lag in Finite Element Simulations. IEEE Computer Graphics and Applications, 16(4), 67-71.

Taylor, V. E., Huang, M., Canfield, T., Stevens, R., Reed, D., & Lamm, S. (1996). Performance Modeling of Interactive, Immersive Virtual Environments for Finite Element Simulations. International Journal of Supercomputer Applications and High Performance Computing, 10(2-3), 145-156.

Taylor, W. (1997). Student Responses to their Immersion in a Virtual environment (HITL Report No. HITL R-97-11): Seattle, WA: University of Washington, Human Interface Technology Laboratory.

Teitel, M. A. (1990). The Eyephone, a Head Mounted Stereo Display. In Proceedings of the Stereoscopic Displays and Applications, (pp. 168-171). : SPIE.

Teixeira, K. (1994). Behind the Scenes at the Guggenheim. Virtual Reality World, 2(3), 66-70.

Teixeira, J. C. (1996). Environments for teaching computer graphics: An experience. Computers and Graphics, 20(6), 927-935.

Teller, S. J., & Sequin, C. H. (1991). Visibility Preprocessing for Interactive Walkthroughs. Computer Graphics, 25(4), 61-69.

Templeman, M. (1995). Kid's CyberTV Programs. VR World, 3(1), 46-48.

Tendick, F., Jennings, R. W., Tharp, G., & Stark, L. (1993). Sensing and Manipulation Problems in Endoscopic Surgery: Experiment, Analysis, and Observation. Presence: Teleoperators and Virtual Environments, 2(1), 66-81.

Terashima, N. (1994). Tele Hyper Virtuality. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 71-75). : NASA.

Terveen, L. G., Hill, W. C., Amento, B., McDonald, D., & Creter, J. (1997). Building Task-Specific Interfaces to High Volume Conversational Data. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 226-233). : ACM, Inc.

Terzopoulos, D., & McInerney, T. (1996). Deformable Models and the Analysis of Medical Images. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 369-378). Washington, DC: IOS Press.

Tessman, T. (1990). Perspectives on Stereo. In Proceedings of the Stereoscopic Displays and Applications, (pp. 22-27). : SPIE.

Testa, B. M. (1994). Virtually Walking in Space. Virtual Reality Special Report, 1(4), 67-76.

Tezuka, T., Goto, A., Kashiwa, K., & Yoshikawa, H. (1994). A Study on Space Interface for Teleoperation System. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 62-67). : IEEE.

Tezuka, T., Kashiwa, K., Mitani, T., & Yoshikawa, H. (1995). Development of machine-maintenance training system in virtual environment. In Proceedings of the Sixth IFAC/IFIP/IFORS/IEA Symposium: Analysis, Design and Evaluation of Man-Machine Systems, (pp. 687-692). : Pergamon.

- Thalmann, D., Astheimer, P., Serra, L., & Slater, M. (1994). Enabling Technologies for VR. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 123-124). : World Scientific Publishing Co, Inc.
- Thalmann, N. M. (1994). Communicating with Virtual Humans. In Proceedings of the ED-MEDIA 94--World Conference on Educational Multimedia and Hypermedia: Educational Multimedia and Hypermedia, (pp. unpaginated). : Association for the Advancement of Computer Education.
- Thalmann, N. M., & Thalmann, D. (1994). Towards virtual humans in medicine: a prospective view. *Computerized Medical Imaging and Graphics*, 18(2), 97-106.
- Thalmann, N. M. (1995). The Role of Facial Communication in Virtual Environments. In Proceedings of the Virtual Reality World '95, (pp. 437-448). : IDG Conferences and Seminars.
- Thalmann, D., Capin, T. K., & Thalmann, N. M. (1995). Participant, User-guided and Autonomous Actors in the Virtual Life Network VLNET. In Proceedings of the ICAT/VRST '95, (pp. 3-11). : NASA.
- Thalmann, D., Jianhua, S., & Chauvineau, E. (1996). Fast Realistic Human Body Deformations for Animation and VR Applications. In Proceedings of the Computer Graphics International, (pp. 166-174). : IEEE Computer Society Press.
- Thalmann, N. M., & Thalmann, D. (1996). Computer Animation. *ACM Computing Surveys*, 28(1), 161-163.
- Thalmann, D. (1996). A new generation of synthetic actors: The real-time and interactive perceptive actors. In Proceedings of the 1996 Pacific Graphics Conference, (pp. 200-219). : Nat. Chiao Tung University.
- Thalmann, N., & Thalmann, D. (1996). Participants and Virtual Humans in Virtual Reality. In Proceedings of the VRAIS '96: IEEE 1996 Virtual Reality Annual International Symposium, (pp. 1-168). : IEEE.
- Thalmann, N. M., & Thalmann, D. (1997). Animating virtual actors in real environments. *Multimedia Systems*, 5(2), 113-125.
- Theasby, P. J. (1992). Virtual Reality And Simulation. In Proceedings of the Virtual Reality International 92: Impacts and Applications, (pp. 78-91). : Meckler Publishing.
- Thomas, J. C. (1992). Human Factors Issues in Virtual Reality. In Proceedings of the Virtual Worlds: Real Challenges, SRI's Conference on Virtual Reality, (pp. 71-76). : Meckler Publishing.
- Thomas, J. C., & Stuart, R. (1992). Virtual Reality and Human Factors. In Proceedings of the Human Factors Society 36th Annual Meeting, (pp. 207-210). : Human Factors Society.
- Thomas, W. (1992). Virtual Reality: Strike Up the Bandwidth. *Template: The Magazine of Engineering Systems and Solutions(VI)*, 8-13.
- Thomas, J., & Stuart, R. (1993). Speech Technology and Virtual Reality. *Virtual Reality Systems*, 1(1), 53-59.
- Thomas, P., & Macredie, R. (1994). Games and the Design of Human-Computer Interfaces. *Educational and Training Technology International*, 31(2), 134-142.
- Thomas, J. J. (1996). The Impact of Virtual Reality on the Industrial Enterprise. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 2-3). : IEEE Computer Society Press.

- Thompson, J. (Ed.). (1992). *Virtual Reality Research and Development: A Directory of Research Projects*. Westport, CT: Meckler.
- Thorisson, K. R. (1993). Estimating Three-Dimensional Space from Multiple Two-Dimensional Views. *Presence: Teleoperators and Virtual Environments*, 2(1), 44-53.
- Thurman, R. A. (1993). Instructional simulation from a cognitive psychology viewpoint. *Educational Technology, Research and Development*, 41(4), 75-89.
- Thurman, R. A., & Mattoon, J. S. (1994). Virtual reality: toward fundamental improvements in simulation-based training. *Educational Technology*, 34(8), 56-64.
- Tidwell, M., Johnston, R. S., Melville, D., & Furness, T. A. (1995). The Virtual Retinal Display - A Retinal Scanning Imaging System. In Proceedings of the Virtual Reality World '95, (pp. 325-334). : IDG Conferences and Seminars.
- Tidwell, M. (1995). A Virtual Retinal Display for Augmenting Ambient Visual Environments. Unpublished Unpublished Master's Thesis, Seattle, WA: College of Engineering, University of Washington.
- Tijerino, Y. A., Mochizuki, K., & Kishino, F. (1994). Interactive 3-D Computer Graphics Driven through Verbal Instructions: Previous and Current Activities at ATR. *Computers & Graphics*, 18(5), 621-631.
- Tijerino, Y. (1995). Visualizing Mental Images in Virtual Spaces. In Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing, (pp. 138-144). : ATR International.
- Tijerino, Y., Yoshida, M., Abe, S., & Kishino, F. (1995). A Shape Knowledge Representation Scheme and Its Application on a Multi-modal Interface for a Virtual Space Teleconferencing System. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 259-265). : IEEE.
- Tinker, P. (1992). Real training in the virtual world. In Proceedings of the WESCON/92 Conference Record, (pp. 372-375). : Electronic Conventions Management.
- Tinker, P., Azuma, R., Hein, C., & Daily, M. (1996). Driving Simulation for Crash Avoidance Warning Evaluation. In Proceedings of the 29th ISATA Dedicated Conference on Simulation, Diagnosis and Virtual Reality in the Automotive Industry, (pp. 367-374). : ISATA.
- Tobias, S. (1989). Another look at research on the adaptation of instruction to student characteristics. *Educational Psychologist*(24), 213-227.
- Todd, N.-W., Hettinger, L. J., Haas, M. W., Russell, C., Warm, J. S., Dember, W. N., & Stoffregen, T. A. (1995). Compensation for the effects of time delay in a helmet-mounted display: perceptual adaptation versus algorithmic prediction. In Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements II, (pp. 154-164). : SPIE.
- Tolani, D., & Badler, N. I. (1996). Real-Time Inverse Kinematics of the Human Arm. *Presence: Teleoperators and Virtual Environments*, 5(4), 393-401.
- Tonfoni, G. (1994). CPP-TRS©: On Using Visual Cognitive Symbols to Enhance Communication Effectiveness. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 136-142). : NASA.
- Torborg, J., & Kajiya, J. T. (1996). Talisman: Commodity Realtime 3D Graphics for the PC. In Proceedings of the SIGGRAPH 96, (pp. 353-363). : ACM.

Torguet, P., Rubio, F., Gaildrat, V., & Caubet, R. (1996). Multi-User Interactions in the Context of Concurrent Virtual World Modelling. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 121-130). : SpringerWien.

Torma, M. J. (1994). Assessment of Emerging Technology's "Value Added": The Integrated Cost, Quality, and Access Model. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 218-220). : Aligned Management Associates.

Torma, M. J. (1994). Surgical Telepresence and VR Applications for a Health-Care System. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 61-62). : SIG-Advanced Applications, Inc.

Torma, M. J. (1994). Virtual Medicine--Clinical Promise and Economic Challenge. *Virtual Reality Systems*, 1(3), 18-19.

Toye, G., Cutkosky, M. R., Leifer, L. J., Tenenbaum, J. M., & Glicksman, J. (1994). SHARE: A methodology and environment for collaborative product development. *The International Journal of Intelligent and Cooperative Information Systems*, 3(2), 129-153.

Traeger, C. (1996). Audio Processing for CyberCycle. Computer Graphics [Focus: "Real" Virtual Reality], 30(4), 59.

Traub, D. C. (1991). Simulated World as Classroom: The Potential for Designed Learning within Virtual Environments. In S. K. Helsel & J. Paris (Eds.), *Virtual Reality: Theory, Practice, and Promise*, (pp. 111-121). Westport, CT: Meckler.

Traub, D. C. (1994). The Promise of Virtual Reality for Learning. In C. E. Loeffler & T. Anderson (Eds.), *The Virtual Reality Casebook*, (pp. 107-117). New York, NY: Van Nostrand Reinhold.

Trelease, R. B. (1996). Toward virtual anatomy: a stereoscopic 3-D interactive multimedia computer program for cranial osteology. *Clinical Anatomy*, 9(4), 269-272.

Treviranus, J. (1994). Virtual Reality Technologies and People with Disabilities. *Presence: Teleoperators and Virtual Environments*, 3(3), 201-207.

Trias, T. S., Chopra, S., Reich, B. D., Moore, M. B., Badler, N. I., Webber, B. L., & Geib, C. W. (1996). Decision Networks for Integrating the Behaviors of Virtual Agents and Avatars. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 156-163). : IEEE Computer Society Press.

Trueman, B. (1995). Virtual Reality Becomes Reality. *VR in the Schools*, 1(1), 2.

Truong, L. V. (1993). Living Color Frame System: PC Graphics Tool for Data Visualization Applications. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 203-211). : NASA.

Truppe, M. (1994). Artma Virtual Patient. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 221). : Aligned Management Associates.

Truppe, M., Pongracz, F., Ploder, O., Wagner, A., & Ewers, R. (1995). Interventional Video Tomography. In Proceedings of the Lasers in Surgery, (pp. 150-152). : SPIE.

Truppe, M., Pongracz, F., Freysinger, W., Gunkel, A., & Thumfart, W. (1995). Interventional Video Tomography. In H. Lemke (Ed.), *Computer Assisted Radiology*, (pp. 1303). Berlin, Germany: Springer.

- Truppe, M. J., Freysinger, W., Gunkel, A. R., & Thumfart, W. F. (1996). Remote-Guided Surgical Bavigation in ENT Surgery. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 280-282). Washington, DC: IOS Press.
- Tsao, J., & Lumsden, C. J. (1997). CRYSTAL: Building Multitext Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 6(1), 57-72.
- Turner, R., Gobbetti, E., & Soboroff, I. (1996). Head-tracked Stereo Viewing with Two-Handed 3D Interaction for Animated Character Construction. *Computer Graphics Forum*, 15(3), C197-C206, C470.
- Tweedie, L. (1997). Characterizing Interactive Externalizations. In Proceedings of the CHI '97: Human Factors in Computing Systems, (pp. 375-382). : ACM, Inc.
- Tyler, C. W., & Clarke, M. B. (1990). The Autostereogram. In Proceedings of the Stereoscopic Displays and Applications, (pp. 182-197). : SPIE.
- Tyler, R. S. (1994). The use of speech-perception tests in audiological rehabilitation: Current and future research needs. *Journal of the Academy of Rehabilitative Audiology*, 27, 47-66.
- Tyre, T. (1989, August). Live Broadcasts from Ocean Floor Bring New Depth to Science Education. *T. H. E. Journal*, 17(1), 42, 44-46.
- Uchiyama, I. S., Katayama, A., Tamura, H., Naemura, T., Kaneko, M., & Harashima, H. (1996). Building a cyber-space by mixing real data based on ray-space theory. In Proceedings of the 3D Image Conference '96, (pp. 13-18). : .
- Uden, L. (1994). Design implications for interactive learning systems. In Proceedings of the Visualization in Scientific Computing: Uses in University Education, (pp. 119-130). : IFIP.
- Umehara, T., Matsuda, T., Chiyokura, H., & Kobayashi, M. (1996). Human Body Textbook with Three-Dimensional Illustrations. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 694-702). Washington, DC: IOS Press.
- Uno, S., & Slater, M. (1997). The Sensitivity of Presence to Collision Response. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 95-105). : IEEE Computer Society Press.
- Urban, V. (1994). VR-OP Theatre of Minimal Invasive Techniques - A Scientific Study and First Results. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 223). : Aligned Management Associates.
- Urdang, E., & Stuart, R. (1992). Orientation enhancement through integrated virtual reality and geographic information systems. In Proceedings of the Virtual Reality and Persons with Disabilities, (pp. 55-62). : CSUN.
- Urquhart, D. (1996). Virtual Reality as an Aid To Data Visualization. *ICL Systems Journal*, 11(1), 48-70.
- Usoh, M., Slater, M., & Vassilev, T. I. (1996). Collaborative Geometrical Modelling in Immersive Virtual Environments. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 111-120). : SpringerWien.
- Utsumi, A., Milgram, P., Takemura, H., & Kishino, F. (1994). Investigation of Errors in Perception of Stereoscopically Presented Virtual Object Locations in Real Display

- Space. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 250-255). : Human Factors and Ergonomics Society.
- Uttal, W. R. (1994). An Integrated Computational Model of an Autonomous, Visually Guided, Undersea Vehicle. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 38-43). : IEEE.
- Vacca, J. (1995). NASA VR Projects: Part II. *VR World*, 3(3), 54-56.
- Vacca, J. R. (1995). The Outer Limits: Virtual Reality on the Internet. *Internet World*, 6(3), 42-47.
- van Dam, A. (1993). VR as a Forcing Function: Software Implications of a New Paradigm. In Proceedings of the IEEE Symposium on Research Frontiers in Virtual Reality, (pp. 5-8). : IEEE Society Press.
- van Dam, A. (1994). VR as a Forcing Function: Software Implications of a New Paradigm. In Proceedings of the SIGGRAPH 1994, (pp. 1:1-1:27). : ACM.
- Van Joolingen, W., & De Jong, T. (1996). Supporting the authoring process for simulation-based discovery learning. In Proceedings of the Euro AI-Ed: European Conference on AI in Education, (pp. unpaginated). : University of Leeds.
- van Liere, R., & van Wijk, J. J. (1996). CSE: A Modular Architecture for Computational Steering. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 257-266). : SpringerWien.
- Vandamme, F. (1995). Virtual and Augmented Reality Challenges and Successes. In Proceedings of the Virtual Reality World '95, (pp. 365-368). : IDG Conferences and Seminars.
- Vanderburgh, J. C. (1994). Space Modeler: An Expanded, Distributed, Virtual Environment for Space Visualization. Unpublished Master's, School of Engineering, Air Force Institute of Technology, Wright Patterson Air Force Base.
- Vanderheiden, G. C., & Mendenhall, J. (1994). Use of a Two-Class Model to Analyze Applications and Barriers to the Use of Virtual Reality by People with Disabilities. *Presence: Teleoperators and Virtual Environments*, 3(3), 193-200.
- Vandewalle, N., & Ausloos, M. (1996). A toy model for life at the "edge of chaos". *Computers and Graphics*, 20(6), 921-923.
- Vannier, M. (1992). Medical Facial Surface Scanner. In Proceedings of the 1992 IMAGE Conference VI, (pp. 295-302). : IMAGE Society.
- Vella, Z., conn, C., & Cederwall, C. (1995). The CitySpace Project. In Proceedings of the Supercomputing '95, (pp. unpaginated). : ACM.
- Venolia, D. (1993). Facile 3D Direct Manipulation. In Proceedings of the INTERCHI'93, (pp. 31-37). : Addison-Wesley.
- Venturino, M., & Kunze, R. J. (1989). Spatial Awareness with a Helmet-Mounted Display. In Proceedings of the Human Factors Society 33rd Annual Meeting, (pp. 1388-1391). : Human Factors Society.
- Venturino, M., & Wells, M. J. (1990). Head Movements as a Function of Field-of-View Size on a Helmet-Mounted Display. In Proceedings of the 34th Annual Meeting of the Human Factors Society, (pp. 1572-1576). : Human Factors Society.
- Verlinden, J. C. (1993). Virtual Books: Integrating Hypertext and Virtual Reality. , Delft University of Technology.

- Veron, H., Southard, D. A., Leger, J. R., & Conway, J. L. (1990). Stereoscopic Displays for Terrain Database Visualization. In Proceedings of the Stereoscopic Displays and Applications, (pp. 124-135). : SPIE.
- Verstreken, K., Van Cleynenbreugel, J., Marchal, G., van Steenberghe, C., & Suetens, P. (1996). Computer-Assisted Planning of Oral Implant Surgery: An Approach Using Virtual Reality. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 423-434). Washington, DC: IOS Press.
- Vian, J. P., & Martin, J. (1992). Binaural Room Acoustics Simulation: Practical Uses and Applications. *Applied Acoustics*, 36(3-4), 293-306.
- Viega, J., Conway, M. J., Williams, G., & Pausch, R. (1996). 3D Magic Lenses. In Proceedings of the UIST '96: the Ninth Annual Symposium on User Interface Software and Technology, (pp. 51-58). : ACM SIGGRAPH.
- Viirre, E., Karlik, S. J., Webber, R., & Cadera, W. (1994). Imaging and Display of Anatomic Movement in Three Dimensions. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 224-227). : Aligned Management Associates.
- Viirre, E. (1996). Vestibular Telemedicine and Rehabilitation: Applications for Virtual Reality. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 299-305). Washington, DC: IOS Press.
- Viirre, E. (1996). Neurology and Virtual Reality: Effects of VR on Nervous System Users. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 729). Washington, DC: IOS Press.
- Vince, J. (1992). VR-promises, promises. *Intelligent Tutoring Media*, 3(1), 29-31.
- Vince, J. (1993). VR Impacts In Flight Simulation. In Proceedings of the VR'93, Virtual Reality International 93: The Third Annual Conference on Virtual Reality, (pp. 106-110). : Meckler.
- Vince, J. A. (1993). Real-Time Interactive Images for Flight Simulation [Abstract]. *Ophthalmic and Physiological Optics: the Journal of the British College of Ophthalmic Opticians*, 13(4), 434-440.
- Vincent, V. J. (1992). The Mandala Virtual Reality System: The Vivid Group. In Proceedings of the Virtual Reality '92, VR Becomes a Business, (pp. 167-170). : Meckler Publishing.
- Vining, D. J., Liu, K., Choplin, R. H., & Haponik, E. F. (1996). Virtual bronchoscopy. Relationships of virtual reality endobronchial simulations to actual bronchoscopic findings. *Chest*, 109(2), 549-553.
- Vining, D. J. (1996). Virtual endoscopy: is it reality? [editorial comment]. *Radiology*, 200(1), 30-31.
- Volino, P., Thalman, N. M., Jianhua, S., & Thalman, D. (1996). An Evolving System for Simulating Clothes on Virtual Actors. *IEEE Computers Graphics and Applications*, 16(5), 42-50.
- von Pichler, C., Radermacher, K., & Rau, G. (1995). Analysis for an Optimization of Stereoscopic Visualization Systems for Clinical Routine. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), Interactive Technology and the New Paradigm for Healthcare, (pp. 389-398). Amsterdam: IOS Press.

von Pichler, C., Radermacher, K., Boeckmann, W., Rau, G., & Jakse, G. (1996). Three-Dimensional versus Two-Dimensional Video Endoscopy: A Clinical Field Study in Laparoscopic Application. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 667-674). Washington, DC: IOS Press.

von Pichler, C., Radermacher, K., Boeckmann, W., Rau, G., Jakse, G., & Schumpelick, V. (1996). The Influence of LCD Shutter Glasses on Spatial Perception in Stereoscopic Visualization. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 523-531). Washington, DC: IOS Press.

von Pichler, C., Radermacher, K., Boeckmann, W., Rau, G., & Jakse, G. (1997). Stereoscopic Visualization in Endoscopic Surgery: Problems, Benefits, and Potentials. *Presence: Teleoperators and Virtual Environments*, 6(2), 198-217.

Voorhost, F. A., Overbeeke, C. J., & Smets, G. J. F. (1996). Spatial Perception During Laparoscopy: Implementing Action-Perception Coupling. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 379-386). Washington, DC: IOS Press.

Vosburgh, K. G. (1996). Image Guided Surgery and Its Potential. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 83-89). Washington, DC: IOS Press.

Vosburgh, K., Lorenzen, W. E., & Burdea, G. (1997). Virtual Reality in Medicine Practice and Training. In Proceedings of the IEEE VRAIS '97: Virtual Collaborative Environments, (pp. unpaginated). : IEEE.

Wada, C., Ifukube, S., Ino, S., & Izumi, T. (1994). Proposal of a New Tactile Display Method of Speech Signals as a Nonverbal Communication for the Profoundly Hearing Impaired. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 95-100). : IEEE.

Wagner, A., Ploder, O., Enislidis, G., Truppe, M., & Ewers, R. (1995). Virtual Image Guided Navigation in Tumor Surgery - Technical Innovation. *Journal of Cranio Maxillo-Facial Surgery*, 23, 271-273.

Wagner, A., Ploder, O., Enislidis, G., Truppe, M., & Ewers, R. (1996). Image Guided Surgery. *International Journal of Oral Maxillofacial Surgery*, 25, 147-151.

Wagner, A., Ploder, O., Zuniga, J., Undt, G., & Ewers, R. (1996). Augmented Reality Environment for Temporomandibular Joint Motion Analysis. *International Journal of Orthod. Orthognath. Surgery*, 11, 127-136.

Wagner, A., Ploder, O., Enislidis, G., Truppe, M., & Ewers, R. (1996). Image-Guided Surgery. *International Journal of Oral Maxillofacial Surgery*, 25, 147-151.

Waldern, J. D. (1993). Virtual Reality-The Next Generation. In Proceedings of the VR'93, Virtual Reality International 93: The Third Annual Conference on Virtual Reality, (pp. 87-100). : Meckler.

Waldrop, M. S. (1995). Real-Time Articulation of the Upper Body for Simulated Humans in Virtual Environments. Unpublished Master's, Naval Postgraduate School, Monterey, California.

Waldrop, M., Pratt, S. M., Pratt, D. R., McGhee, R., Falby, J. S., & Zyda, M. J. (1995). Real-Time Upper Body Articulation of Humans in a Networked Interactive Virtual Environment. In Proceedings of the First ACM Workshop on Simulation and Interaction in Virtual Environments, (pp. 210-214). : ACM.

- Walker, H. (1996). An Organisational perspective on Collaborative Virtual Environments (CVEs). In Proceedings of the CVE'96: Collaborative Virtual Environments, (pp. not paginated). : University of Nottingham.
- Walker, G., Morphett, J., Fauth, M., & Rea, P. (1996). Interactive Visualisation and Virtual Environments on the Internet. *British Telecommunications Engineering*, 15, 91-99.
- Wall, T. (1994). Almost Real, Almost Here. The Electronic School [an insert in The American School Board Journal, 18(9), A33-A36.
- Walser, R. (1990). Doing It Directly-the Experiential Design of Cyberspaces. In Proceedings of the Stereoscopic Displays and Applications, (pp. 147-153). : SPIE.
- Walter, D. (1993). Systemised Serendipity for Producing Computer Art. *Computers and Graphics*, 17(6), 699-700.
- Wang, C. P., Koved, L., & Dukach, S. (1990). Design for Interactive Performance in a Virtual Laboratory. In Proceedings of the 1990 Symposium on Interactive 3-D Graphics, (pp. 39-40). : ACM SIGGRAPH.
- Wang, J. F. (1990). Real-Time Optical 3D Tracker for Head Mounted Display Systems (Doctoral thesis TR90-011): Chapel Hill, NC: Dept. of Computer Science, North Carolina Univ.
- Wang, J. F., Chi, V., & Fuchs, H. (1990). Real-Time Optical 3D Tracker for Head-Mounted Display Systems. In Proceedings of the 1990 Symposium on Interactive 3D Graphics, (pp. 205-215). : ACM.
- Wang, J. F., Azuma, R., Bishop, G., Chi, V., & Eyles, J. (1990). Tracking a Head-Mounted Display in a Room-Sized Environment with Head-Mounted Cameras. In Proceedings of the Helmet-Mounted Displays II, (pp. 47-57). : SPIE.
- Wang, Y., & Sackier, J. (1994). Robotically Enhanced Surgery. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 218-220). : Aligned Management Associates.
- Wang, Q., Green, M., & Shaw, C. (1995). EM - An Environment Manager for Building Networked Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 11-18). : IEEE Computer Society Press.
- Wang, S. W., & Kaufman, A. E. (1995). Volume Sculpting. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 151-156). : ACM.
- Wang, Y. (1995). A Clinical Examination of Robotics in Surgery. *Journal of Medicine and Virtual Reality*, 1(1), 36-38.
- Wang, C., & Cannon, D. J. (1996). Virtual-Reality-based Point-and-Direct Robotic Inspection in Manufacturing. *IEEE Transactions on Robotics and Automation*, 12(4), 516-532.
- Wann, J. P., & Rushton, S. K. (1993). Perceptual Issues in Visualisation with Virtual Environment Displays. In Proceedings of the ANZ Conference on Intelligent Information Systems, (pp. 755-759). : IEEE.
- Wann, J. P., & Turnbull, J. D. (1993). Motor skill learning in cerebral palsy: movement, action and computer-enhanced therapy. *Baillieres Clinical Neurology*, 2(1), 15-28.
- Wann, J. P., Rushton, S. K., & Mon-Williams, M. (1993, September./October). What's Wrong With Your Head-Mounted Display? *CyberEdge Journal*(17), 1-2.

Wann, J. P., & Mon-Williams, M. (1995). Natural Problems in the Perception of Virtual Environments. *Vision Research*, 35, 2731-2736.

Wann, J., & Mon-Williams, M. (1996). What Does Virtual Reality Need? Human Factors Issues in the Design of Three-Dimensional Computer Environments. *International Journal of Human-Computer Studies*, 44, 829-847.

Wann, J. P. (1996). Virtual reality environments for rehabilitation of movement disorders. In Proceedings of the ECDVRAT: 1st European Conference on Disability, Virtual Reality and Associated Technologies, (pp. unpaginated). : University of Reading.

Wann, J. P., & Mon-Williams, M. (1997). Health Issues with Virtual Reality Displays: What We Do Know and What We Don't. *Computer Graphics* [special issue - Focus: Next Generation Visual Displays], 31(2), 53-57.

Wapler, M. (1995). Medical Manipulators - Breakthrough with Virtual Reality. In Proceedings of the Virtual Reality World '95, (pp. 145-153). : IDG Conferences and Seminars.

Ware, C., & Osborne, S. (1990). Exploration and Virtual Camera Control in Virtual Three Dimensional Environments. In Proceedings of the 1990 Symposium on Interactive 3-D Graphics, (pp. 175-183). : ACM.

Ware, C., Arthur, K., & Kellogg, S. B. (1993). Fish Tank Virtual Reality. In Proceedings of the INTERCHI '93, (pp. 31-37). : Addison-Wesley.

Ware, C. (1994). Reaching for Objects in VR Displays: Lag and Frame Rate. *ACM Transactions on Computer-Human Interaction*, 1(4), 331-356.

Ware, C., & Balakrishnan, R. (1994). Target Acquisition In Fish Tank VR: The Effects Of Lag And Frame Rate. In Proceedings of the Graphics Interface '94, (pp. 1-7, 18-20). : Canadian Information Process Society.

Ware, C. (1996). Moving Motion Metaphors. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 225-226). : ACM.

Warne, S. (1994). The Mandala Virtual World System, or, Virtual Reality - No Strings Attached. *Virtual Reality World*, 2(2), 65-71.

Warne, S. (1994). Mandala Sports Simulators. *Virtual Reality World*, 2(5), 44-49.

Warnecke, H.-J., & Glitz, R. (1995). Virtual Reality - Potential and Risks of a New Technology. In Proceedings of the Virtual Reality World '95, (pp. 479-481). : IDG Conferences and Seminars.

Warner, D., Anderson, T., & Johanson, J. (1994). Bio-Cybernetics: A Biologically Responsive Interactive Interface. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 237-241). : Aligned Management Associates.

Warner, D., Sale, J., Anderson, T., & Johanson, J. (1994). Bio-Cybernetics: A Biologically Responsive Interactive Interface. *Virtual Reality Systems*, 1(3), 34-38.

Warner, D., & Sale, J. (1995). Intervention Informatics: Healing with Information. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 399-405). Amsterdam: IOS Press.

Warner, D., Sale, J., & Viirre, E. (1996). Distributed Medical Intelligence: A Systems Approach for Developing an Integrative Health Care Information Distribution Infrastructure. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets*

Virtual Reality: Health Care in the Information Age, (pp. 80-83). Washington, DC: IOS Press.

Warren, K. C., & Goodman, B. A. (1993). Engineering Intelligent Tutoring Systems. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 235-243). : NASA.

Watanabe, M., & Jennett, P. (1994). Access to Quality Cost-Effective Specialty Care: How Technology Can Help. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 90-91). : Aligned Management Associates.

Waters, K., & Wang, S. (1990). A 3-D Interactive Physically-Based Micro World. In Proceedings of the Extracting Meaning from Complex Data: Processing, Display, Interaction, (pp. 91-98). : SPIE.

Watkins, J., & Provost, M. (1994). Design of terrain reasoning database for CCTT. In Proceedings of the Fifth Annual Conference on AI, Simulation, and Planning in High Autonomy Systems, Distributed Interactive Simulation Environments, (pp. 62-68). : IEEE Computer Society Press.

Watkinson, D. (1990, October). Virtual Reality: The Ultimate Special Effect. Videography, 107-111.

Watson, B. (1994). A Survey of Virtual Reality in Japan. Presence: Teleoperators and Virtual Environments, 3(1), 1-18.

Watson, B. A., & Hodges, L. F. (1995). Using Texture Maps to Correct of Optical Distortion in Head-Mounted Displays. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 172-178). : IEEE Computer Society Press.

Watson, B., Walker, N., & Hodges, L. F. (1996). Effectiveness of Spatial Level of Detail Degradation in the Periphery of Head-Mounted Displays. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 227-228). : ACM.

Watson, B., Spaulding, V., Walker, N., & Ribarsky, W. (1997). Evaluation of the Effects of Frame Time Variation on VR Task Performance. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 38-44). : IEEE Computer Society Press.

Watt, A. E. (1994). Modeling of Real-Time Dynamic Effects. Unpublished M. S. Thesis, Monterey, CA: Naval Postgraduate School.

Watt, A. (1996, March). Rendering Techniques: Past, Present and Future. ACM Computing Surveys, 28(1), 157-160.

Webster, J. A. (1989). Stereoscopic Full Field of Vision Display System to Produce Total Visual Telepresence. In Proceedings of the Display System Optics II, (pp. 63-70). : .

Webster, R. W., & Wayde, S. (1996). A virtual reality and scientific visualization laboratory for undergraduates in computer science. In Proceedings of the FIE (Frontiers in Education) '96: Technology-Based Re-Engineering. Engineering Education., (pp. 818-822). : IEEE.

Weghorst, S. (1991). Inclusive Biomedical Visualization (HITL Report R-91-2): University of Washington, Human Interface Technology Laboratory.

Weghorst, S. J. (1992). Human Interface Technology Laboratory. In Proceedings of the Virtual Worlds: Real Challenges - SRI's 1991 Conference on Virtual Reality, (pp. 77-82). : Meckler Publishing.

Weghorst, S., Prothero, J., & Furness, T. (1994). Virtual Images in the Treatment of Parkinson's Disease Akinesia. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 242-243). : Aligned Management Associates.

Weghorst, S., Prothero, J., Furness, T., Anson, D., & Reiss, T. (1994). Virtual Images in the Treatment of Parkinson's Disease Akinesia (HITL Publication P-95-18): University of Washington, Human Interface Technology Laboratory.

Weghorst, S., & Reiss, T. (1995). Augmented Reality in the Treatment of Parkinson's Disease (HITL Publication P-95-18): University of Washington, Human Interface Technology Laboratory.

Weghorst, S. J. (1996). Therapeutic Augmented Reality. In S. J. Weghorst, H. B. Sieburg, & K. S. Morgan (Eds.), Medicine Meets Virtual Reality: Health Care in the Information Age, (pp. 730). Washington, DC: IOS Press.

Wegner, C. M., & Karron, D. B. (1996). Surgical Navigation Using Audio Feedback. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 450-460). Washington, DC: IOS Press.

Weimer, D., & Ganapathy, S. K. (1989). A Synthetic Visual Environment with Hand Gesturing and Voice Input. In Proceedings of the CHI '89: Conference on Human Factors in Computing Systems, (pp. 235-240). : ACM.

Weingartner, T., & Dillman, R. (1996). Simulation of Jaw-Movements for the Musculoskeletal Diagnoses. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), Medicine Meets Virtual Reality: Global Healthcare Grid, (Vol. 39, pp. 401-410). Washington, DC: IOS Press.

Weintraub, D. J., & Ensing, M. (1992). Human Factors Issues in Head-Up Display Design: the Book of HUD (CSERIAC-SOAR): Wright-Patterson Air Force Base, OH: CSERIAC.

Weir, S. (1982). The Computer as a Creative Educational Tool. American Annals of the Deaf, 127(5), 690-692.

Weir, S. (1992). Electronic Communities of Learners: Fact or Fiction (TERC-WP-3-92): Washington, DC: Department of Education & National Science Foundation.

Welch, W. H., Feldman, M. R., & Te-Kolste, R. D. (1995). Diffractive optics for head mounted displays. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems II, (pp. 209-210). : SPIE.

Welch, R. B., Blackmon, T. T., Liu, A., Mellers, B. A., & Stark, L. W. (1996). The Effects of Pictorial Realism, Delay of Visual Feedback, and Observer Interactivity on the Subjective Sense of Presence. Presence: Teleoperators and Virtual Environments, 5(3), 263-273.

Weller, F., & Mencl, R. (1996). Nearest Neighbour Search for Visualization Using Arbitrary Triangulation. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 191-200). : SpringerWien.

Wells, M. J., & Griffin, M. J. (1984). Benefits of Helmet-Mounted Display Image Stabilization Under Whole-Body Vibration. Aviation, Space and Environmental Medicine, 55(1), 13-18.

- Wells, M. J., & Griffin, M. J. (1987). Flight Trial of a Helmet-Mounted Display Image Stabilization System. *Aviation, Space and Environmental Medicine*, 58, 319-322.
- Wells, M. J., & Griffin, M. J. (1987). A Review and Investigation of Aiming and Tracking Performance with Head-Mounted Sights. *IEEE Transactions on Systems, Man and Cybernetics*, 17(2), 210-221.
- Wells, M. J., & Griffin, M. J. (1988). Tracking with the Head During Whole-Body Vibration. In J. Patrick & K. D. Duncan (Eds.), *Training, Human Decision Making and Control*, (pp. 323-333). Amsterdam: Elsevier Science Publishers.
- Wells, M. J., Venturino, M., & Osgood, R. K. (1988). Using Target Replacement Performance to Measure Spatial Awareness in a Helmet-Mounted Simulator. In *Proceedings of the 32nd Annual Meeting of the Human Factors Society*, (pp. 1429-1433). : Human Factors Society.
- Wells, M. J., & Venturino, M. (1989). The Effect of Increasing Task Complexity on the Field-of-View Requirements for a Visually Coupled System. In *Proceedings of the 33rd Annual Scientific Meeting of the Human Factors Society*, (pp. 91-95). : Human Factors Society.
- Wells, M. J., Venturino, M., & Osgood, R. K. (1989). The Effect of Field-of-View Size on Performance at a Simple Simulated Air-to-Air Mission. In *Proceedings of the Helmet-Mounted Displays*, (pp. 126-137). : SPIE.
- Wells, M. J., & Venturino, M. (1990). Performance and Head Movements Using a Helmet-Mounted Display with Different Fields-of-View. *Optical Engineering*, 29(8), 870-877.
- Wells, B. (1991). A Miniature Virtual Display Implement. *Optoelectronics - Devices and Technologies*, 6(1), 155-162.
- Wells, M. J., & Osgood, R. K. (1991). The Effects of Head and Sensor Movement on Flight Profiles During Simulated Dive Bombing. In *Proceedings of the 35th Annual Scientific Meeting of the Human Factors Society*, (pp. 22-26). : Human Factors Society.
- Wells, B. (1992). A Very High Resolution Virtual Display. In *Proceedings of the High-Resolution Displays and Projection Systems*, (pp. 134-140). : SPIE.
- Wells, M. J. (1992). Virtual Reality: Technology, Experience, Assumptions. *Human Factors Society Bulletin*, 35(9), 1-3.
- Wells, M. J., & Haas, M. (1992). The Human Factors of Helmet-Mounted Displays and Sights. In M. Karim (Ed.), *Electro-Optical Displays*, (pp. 743-785). New York, NY: Marcel Dekker.
- Wells, M. J., & Osgood, R. K. (1993). InterView: A Software Tool for Interface Design. In *Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting, Designing for Diversity*, (pp. 1041). : Human Factors & Ergonomics Society.
- Wells, F. S., & Kick, R. C. (1996). Enhancing Teaching and Learning in Higher Education with a Total Multimedia Approach. In *Proceedings of the Mid-South Instructional Technology Conference*, (pp. on microfiche). : Tennessee Technological University.
- Wenzel, E. M., Wightman, F. L., & Foster, S. H. (1988). A Virtual Display System for Conveying Three-Dimensional Acoustic Information. In *Proceedings of the Human Factors Society 32nd Annual Meeting*, (pp. 86-90). : Human Factors Society.

Wenzel, E. M., Stone, P. K., Fisher, S. S., & Foster, S. H. (1990). A System for Three-Dimensional Acoustic 'Visualization' in a Virtual Environment Workstation. In Proceedings of the Visualization '90: First IEEE Conference on Visualization, (pp. 329-337). : IEEE Computer Society Press.

Wenzel, E. M. (1992). Localization in Virtual Acoustic Displays. *Presence: Teleoperators and Virtual Environments*, 1(1), 80-107.

Wenzel, E. M. (1992). Three-Dimensional Virtual Acoustic Displays. In Proceedings of the Virtual Worlds: Real Challenges - SRI's 1991 Conference on Virtual Reality, (pp. 83-88). : Meckler Publishing.

Wenzel, E. M. (1994). Spatial Sound and Sonification. In Proceedings of the ICAD, Santa Fe Institute Studies in the Sciences of Complexity: Auditory Display: Sonification, Audification, and Auditory Interfaces, (pp. 127-150). : Addison-Wesley Publishing Company.

Werkhoven, P. J., & Hoekstra, W. (1994). Realization of a virtual environment (Report TNO-TM 1994 B-21): TNO Human Factors Research Institute.

Werkhoven, P. J., & Kooi, F. L. (1995). Spatial localization in real and virtual environments (Report TNO-TM 1995 B-5): TNO Human Factors Research Institute.

Werkhoven, P. (1996). Virtual Environment Essential for Designing Ships. *Computer Graphics [Focus: "Real" Virtual Reality]*, 30(4), 51-52.

Werkhoven, P. J., & Snippe, H. P. (1996). An efficient adaptive procedure for psychophysical discrimination experiments. *Behavior Research Methods, Instruments and Computers*, 28(4), 556-562.

Werkhoven, P. J., Post, W. M., & Punte, P. A. J. (1997). Validation of ADCF bridge concepts using virtual environments techniques (TNO Report TM-97 [in preparation]): TNO Human Factors Research Institute.

Werkhoven, P. J., & Groen, J. (1997). Interactive Virtual Environments: Adaptation to virtual hand position (TNO Report TM-97-B003): TNO Human Factors Research Institute.

Werkhoven, P. J., Mooij, A. J. M., Lotens, W. A., & Riemersma, J. B. J. (1997). Human Factors issues of Virtual Environments for training purposes (TNO Report TM-97-A002): TNO Human Factors Research Institute.

West, J. E., Blauert, J., & Maclean, D. J. (1992). Teleconferencing System Using Head-Related Signals. *Applied Acoustics*, 36, 327-334.

West, A. M., Howard., T. L. J., Hubbald, R. J., Murta, A. D., Snowdon, D. N., & Butler, D. A. (1993). AVIARY: A Generic Virtual Reality Interface for Real Applications. In R. A. Earnshaw, M. A. Gigante, & H. Jones (Eds.), *Virtual Reality Systems*, (pp. 213-236). Orlando, FL: Academic Press, Inc.

Westermann, B., & Hauser, R. (1996). Non-invasive 3-D patient registration for image-guided skull base surgery. *Computers & Graphics*, 20(6), 793-799.

Wexelblat, A. (Ed.). (1993). *Virtual Reality: Applications and Explorations*. Boston, MA: Academic Press Professional.

Wexelblat, A. (1994). Natural Gesture in Virtual Environments. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 5-16). : World Scientific Publishing Co, Inc.

- Wexelblat, A. (1995). An Approach to Natural Gesture in Virtual Environments. *ACM Transactions on Computer-Human Interaction [Special Issue on Virtual Reality Software and Technology]*, 2(3), 179-200.
- Whalley, L. J. (1995). Ethical Issues in the Application of Virtual Reality to Medicine. *Comput. Biol. Medicine*, 25(2), 107-114.
- Wheless, G. H., Lascara, C. M., Valle-Levinson, A., Brutzman, D. P., & Sherman, B. (1995). The Chesapeake Bay Virtual Ecosystem Model: Interacting with a Coupled Bio-Physical Simulation. In *Proceedings of the Supercomputing '95*, (pp. unpaginated). : ACM.
- Wheless, G. H., Lascara, C. M., Valle-Levinson, A., Brutzman, D. P., Sherman, W., Hibbard, W., & Paul, B. E. (1996). Virtual Chesapeake Bay: Interacting with a Coupled Physical/Biological Model. *IEEE Computer Graphics and Applications*, 16(4), 52-57.
- Wheless, G. H., Lascara, C. M., Valle-Levinson, A., Brutzman, D. P., Sherman, W., Hibbard, W. L., & Paul, B. E. (1996). The Chesapeake Bay Virtual Environment (CBVE): Initial Results from the Prototypical System. *International Journal of Supercomputer Applications and High Performance Computing*, 10(2-3), 199-210.
- Whitbeck, C. (1993). Virtual Environments: Ethical Issues and Significant Confusions. *Presence: Teleoperators and Virtual Environments*, 2(2), 147-152.
- Whitelock, D., & Holland, S. (1992). Virtual worlds and their role in investigating change in cognitive models of motion. In *Proceedings of the IEE Colloquium on 'Using Virtual Worlds'*, (pp. 2/1-2/5). : IEE.
- Whitelock, D., Brna, P., & Holland, S. (1996). What is the Value of Virtual Reality for Conceptual Learning? Towards a Theoretical Framework. In *Proceedings of the Euro AI-Edu: European Conference on AI in Education*, (pp. unpaginated). : University of Leeds.
- Whitestone, J. J. (1993). Design and Evaluation of Helmet Systems Using 3D Data. In *Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting, Designing for Diversity*, (pp. 64-68). : Human Factors Society.
- Whitfield, G., & Steel, J. (1995). Application Development Using RealiTools. In *Proceedings of the Virtual Reality World '95*, (pp. 251-262). : IDG Conferences and Seminars.
- Wickens, C. D., Todd, S., & Seidler, K. (1989). Three-Dimensional Displays: Perception, Implementation, Applications (CSERIAC SOAR-89-01): Wright-Patterson Air Force Base, OH: CSERIAC.
- Wickens, C. D. (1990). Three-Dimensional Stereoscopic Display Implementation: Guidelines Derived from Human Visual Capabilities. In *Proceedings of the Stereoscopic Displays and Applications*, (pp. 2-11). : SPIE.
- Wickens, C. D., Kramer, A., Andersen, J., Glasser, A., & Sarno, K. (1990). Focused and Divided Attention in Stereoscopic Depth. In *Proceedings of the Stereoscopic Displays and Applications*, (pp. 28-34). : SPIE.
- Wickens, C. D. (1992). Virtual Reality and Education. In *Proceedings of the IEEE International Conference on Systems, Man and Cybernetics*, (pp. 842-847). : IEEE.
- Wickens, C. D., & Baker, P. (1995). Cognitive Issues in Virtual Reality. In T. A. Furness & W. Barfield (Eds.), *Virtual Environments and Advanced Interface Design*, (pp. 514-542). New York, NY: Oxford University Press.

Wickham, J. E. (1994). Minimally invasive surgery: Future developments. *BMJ*, 308(6922), 193-196.

Wiederhold, M. D. (1994). Neural Networks in Medical Diagnosis. In Proceedings of the Medicine Meets Virtual Reality II: Interactive Technology and Healthcare: Visionary Applications for Simulation Visualization Robotics, (pp. 244-246). : Aligned Management Associates.

Wiederholt, B. J., Widjaja, T. K., Yasutake, J. Y., & Isoda, H. (1993). Advanced Technology Training System on Motor Operated Valves. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 117-127). : NASA.

Wierda, M., Van Wolffelaar, P. C., & Van Winsum, W. (1994). Immersive virtual environments as trainer: system design from a cognitive stance. In Proceedings of the Virtual Interfaces: Research and Applications, (pp. 6/1-6/6). : AGARD.

Wiet, G. J., Stredney, D., Yagel, R., Swan, J. E., Shareef, N., Schmalbrock, P., Wright, K., Smith, J., & Schuller, D. E. (1996). Cranial Base Tumor Visualization through High-Performance Computing. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 43-59). Washington, DC: IOS Press.

Wiet, G. J., Yagel, R., Stredney, D., Schmalbrock, P., Sessana, D. J., Kurzion, Y., Rosenberg, L., Levin, M., & Martin, K. (1996). A Volumetric Approach to Virtual Simulation of Functional Endoscopic Sinus Surgery. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 167-179). Washington, DC: IOS Press.

Wihelmi, F. H. (1995). Real-time Acoustic Simulation for Interior Design. In Proceedings of the Virtual Reality World '95, (pp. 125-132). : IDG Conferences and Seminars.

Wiker, S. F., Baker, D. R., Arndt, S. R., & Zhou, W. (1996). Impact of Varying Levels of Autostereovision Upon Telemanipulation. In Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting, (pp. 1141-1145). : HFES.

Wildes, R. P. (1990). Surface Orientation from Binocular Stereo Orientational Disparity. In Proceedings of the Intelligent Robots and Computer Vision VIII: Algorithms and Techniques, (pp. 309-317). : SPIE.

Wiley, L. L., & Brown, R. W. (1994). MH-53J PAVE LOW helmet-mounted display flight test. In Proceedings of the Helmet- and Head-Mounted Displays and Symbology Design Requirements, (pp. 207-214). : SPIE.

Wiley, D. J., & Duckworth, A. N. (1996). Adaptive Level of Detail Technique for Real-Time Display in Virtual Reality. In Proceedings of the 24th AIPR Workshop on Tools and Techniques for Modeling and Simulation, (pp. 192-203). : SPIE.

Wiley, D. J., & Hahn, J. K. (1997). The Interpolation Synthesis for Articulated Figure Motion. In Proceedings of the IEEE 1997 Virtual Reality Annual International Symposium, (pp. 156-160). : IEEE Computer Society Press.

Wilkins, D. C. (1993). Generic Expert System Shells and Apprenticeship Tutoring: The Representation and Use of Explicit Control Knowledge. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 39). : NASA.

Williams, T. (1988, March 1). Input Technologies Extend the Scope of User Involvement. *Computer Design*, 41-51.

- Williams, S. P., & Parrish, R. V. (1990). New Computational Control Techniques and Increased Understanding for Stereo 3-D Displays. In Proceedings of the Stereoscopic Displays and Applications, (pp. 73-82). : SPIE.
- Williams, P. (1992). Applying AI to Virtual Environments. *AI Expert*, 7(8), 26-29.
- Williams, P. (1993). Reversing the Camera Seeking AI from a New Perspective. In Proceedings of the VR'93, Virtual Reality International 93: The Third Annual Conference on Virtual Reality, (pp. 56-61). : Meckler.
- Williams, R. D. (1993). Hot Topics: Virtual Reality. *IEEE Computer*, 26(2), 79-83.
- Williford, J. S., Hodges, L. F., North, M. M., & North, S. M. (1993). Relative effectiveness of virtual environment desensitization and imaginal desensitization in the treatment of acrophobia. In Proceedings of the Graphics Interface '93, (pp. 162). : Canadian Inf. Process. Soc.
- Wilson, D. L. (1992). Researchers Hope to Lead Students into 'Virtual Reality'. *The Chronicle of Higher Education*, 38, A23-A25.
- Wilson, D. L. (1994). A Key for Entering Virtual Worlds. *The Chronicle of Higher Education*, 41(12), A18-A19, A21.
- Wilson, J. M., & Mosher, D. N. (1994). The Prototype of the Virtual Classroom. *Journal of Instruction Delivery Systems*, 8(3), 28-33.
- Wilson, J. R., Brown, D. J., Cobb, S. V., D'Cruz, M. M., & Eastgate, R. M. (1995). Manufacturing Operations in Virtual Environments (MOVE). *Presence: Teleoperators and Virtual Environments*, 4(3), 306-317.
- Wilson, J. R., Nichols, S., & Ramsey, A. (1995). Virtual reality health and safety: Facts, speculation and myths. *VR News*, 4(9), 20-24.
- Wilson, J. R. (1995). Factors of Virtual Environments and Effects on Participants. *Optometry and Vision Science: Supplement*, 72(12), 168.
- Wilson, J. R., Cobb, S. V., & D'Cruz, M. (1995). Virtual Environments as an Integrating Medium. In Proceedings of the Virtual Reality World '95, (pp. 205-212). : IDG Conferences and Seminars.
- Wilson, J. R., D'Cruz, M. D., Cobb, S. V. G., & Eastgate, R. M. (1995). *Virtual Reality for Industrial Application: Opportunities and Limitations*. Nottingham, UK: Nottingham University Press.
- Wilson, J. R., D'Cruz, M. D., Cobb, S., & Eastgate, R. (1996). *Virtual Reality for Industrial Applications: Opportunitites and Limitations*. Nottingham, UK: Nottingham University Press.
- Wilson, J. R. (1996). Integration of Design, Planning, Production and Ergonomics through Virtual Environments. In J. O. Brown & H. W. Hendrick (Eds.), *Human Factors in Organizational Design and Management - V*, (pp. 377-382). Amsterdam: North-Holland.
- Winn, W. D., & Bricken, W. (1992). Designing Virtual Worlds for Use in Mathematics Education: The Example of Experiential Algebra. *Educational Technology*, 32(12), 12-19.
- Winn, W. D. (1993). A Conceptual Basis for Educational Applications of Virtual Reality (R-93-9): Seattle, WA: Human Interface Technology Laboratory.
- Winn, W. (1993). Instructional Design and Situated Learning: Paradox or Partnership? *Educational Technology*, 33(3), 16-21.

Winn, W. D. (1994). Educational applications of virtual reality: The case for immersion. In Proceedings of the ACCE Conference on Multimedia and Education, (pp. unpaginated). : ACCE.

Winn, W. (1994). Designing and using virtual environments: The advantage of immersion. In Proceedings of the ED-MEDIA 94: Educational Multimedia and Hypermedia, 1994, (pp. 695). : Asoociation for the Advancement of Computers in Education.

Winn, W. (1995). The Virtual Reality Roving Vehicle Project. T.H.E. Journaal: Technological Horizons in Education Journal, 23(5), 70-74.

Winn, W. D., Hoffman, H., & Osberg, K. (1995). Semiotics and the design of objects, actions and interactions in virtual environments. In Proceedings of the American Educational Research Association, (pp. unpaginated). : AERA.

Winn, W. (1996). Learning virtually. In Proceedings of the Northcon/96: IEEE Technical Applications Conference, (pp. 237-242). : IEEE.

Winn, W. (1997). The Impact of Three-Dimensional Immersive Virtual Environments on Modern

Pedagogy (HITL Technical Report R-97-15): Seattle, WA: University of Washington, Human Interface Technology Laboratory.

Winn, W., Hoffman, H., & Osberg, K. (1997). Semiotics and the Design of Objects, Actions and Interactions in Virtual Environments (HITL Publication R-95-7): Seattle, WA: University of Washington, Human Interface Technology Laboratory.

Winn, W. D., Hoffman, H., Hollander, A., Osberg, K., Rose, H., & Char, P. (1997). The Effect of Student Construction of Virtual Environments on the Performance of High- and Low-Ability Students (HITL TR-R-97-6): Seattle, WA: University of Washington, Human Interface Technology Laboratory.

Winn, W. D., Hoffman, H., Hollander, A., Osberg, K., Rose, H., & Char, P. (1997). The Effect of Student Construction of Virtual Environments on the Performance of High- and Low-Ability Students. In Proceedings of the Annual Meeting of the American Educational Research Association, (pp. in press). : AERA.

Winn, W. D. (1997). Designing Highly Interactive Learning Environments - Are "Traditional" ID Procedures Adequate? In Proceedings of the 1997 Annual Meeting of the American Educational Research Association, (pp. in press). : AERA.

Winn, W. D. (1997, [in press]). Virtual environments in maintenance training. In G. Pahl (Ed.), Maintenance training, (pp. in press). New York, NY: Springer-Verlag.

Winsch, B. J., Atwood, N. K., & Quinkert, K. A. (1994). Using a Distributed Interactive Simulation Environment to Investigate Machine Interface and Training Requirements. In Proceedings of the Human Factors and Ergonomics Society, 38th Annual Meeting, (pp. 1033-1037). : Human Factors and Ergonomics Society.

Winslow, J. (1996). Multimedia and virtual reality in instruction: some risks of virtual learning. In Proceedings of the SITE 96 - Seventh International Conference of the Society for Information Technology and Teacher Education: Technology and Teacher Education Annual, (pp. 543-545). : Association for the Advancement of Computer Education.

- Wißkerchen, P., Kansy, K., & Schmitgen, G. (1996). Intergrating Graphics into Video Image-Based Camera Tracking and Filtering. In Proceedings of the Third Eurographics Workshop on Virtual Environments, (pp. 74-84). : SpringerWien.
- Witkin, A., Gleicher, M., & Welch, W. (1990). Interactive Dynamics. In Proceedings of the 1990 Symposium on Interactive 3D Graphics, (pp. 11-22). : ACM SIGGRAPH.
- Witmer, B. G., & Singer, M. J. (1994). Measuring Presence in Virtual Environments (ADA286 183): Springfield, VA: NTIS.
- Witmer, B. G., Bailery, J. H., & Knerr, B. W. (1995). Training dismounted soldiers in virtual environments: Route learning and transfer (ADA A292 900): Springfield, VA: NTIS.
- Witmer, B. G., Bailey, J. H., Knerr, B. W., & Parsons, K. C. (1996). Virtual spaces and real world places: transfer of route knowledge. International Journal of Human-Computer Studies, 45(4), 413-428.
- Wittenberg, G. (1995). Training with virtual reality. Assembly Automation, 15(3), 12-14.
- Wixson, S. (1990). Volume Visualization on a Stereoscopic Display. In Proceedings of the Stereoscopic Displays and Applications, (pp. 110-112). : SPIE.
- Wloka, M. M. (1993). Incorporating Update Rates into Today's Graphics Systems (Brown-CS-93-056): Brown University.
- Wloka, M. M. (1994). Lag in Multiprocessor VR. In Proceedings of the ACM SIGGRAPH 1994, (pp. 11:1-11:23). : ACM.
- Wloka, M. M. (1995). Lag in Multiprocessor Virtual Reality. Presence: Teleoperators and Virtual Environments, 4(1), 50-63.
- Wloka, M. M., & Anderson, B. G. (1995). Resolving Occlusion in Augmented Reality. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 5-12). : ACM SIGGRAPH.
- Wong, W. T., Pan, J. Y.-C., & Plummer, J. D. (1992). A Virtual Factory-Based Environment for Semiconductor Device Development. In Proceedings of the IEEE International Semiconductor Manufacturing Science Symposium (ISMSS), (pp. 117-123). : IEEE.
- Wong, P. C. C., Dagit, C., & Jacobson, R. (1994). The Virtual Environment Theater as an Architectural and Urban Design Review System. In Proceedings of the VRST '94: Virtual Reality Software and Technology, (pp. 319-320). : World Scientific Publishing Co, Inc.
- Wood, F., Brown, D., Amidon, R. A., Alferness, J., Joseph, B., Gillilan, R. E., & Faerman, C. (1996). WorkSpace and the Study of Chagas' Disease. IEEE Computer Graphics and Applications, 16(4), 72-78.
- Woods, A. J., Docherty, T., & Koch, R. (1993). Image Distortions in Stereoscopic Video Systems. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 36-48). : SPIE.
- Woodward, J. (1992). Virtual Reality and Its Potential Use in Special Education. Identifying Emerging Issues and Trends in Technology for Special Education (ERIC Documentation Reproduction Service No. ED 350 766): Washington, DC, USA: COSMOS Corporation.

- Woodward, G. (1993). Interactive Dynamics for Virtual Worlds: Background and Preliminary Architecture (R-93-7): Seattle, WA: Human Interface Technology Laboratory.
- Woodward, P. R. (1993). Interactive Scientific Visualization of Fluid Flow. *Computer*, 26(10), 13-26.
- Woolley, B. (1992). Virtual Worlds: A Journey in Hype and Hyperreality. Oxford, UK: Blackwell Publishers.
- Worthington, J. W., Duncan, K., & Crosier, W. G. (1993). Network and User Interface for PAT Dome Virtual Motion Environment System. In Proceedings of the 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology, (pp. 15-19). : NASA.
- Wright, R. H. (1995). Virtual reality psychophysics: Forward and lateral distance, height and speed perceptions with a wide angle helmet display (AD A294 027): Springfield, VA: NTIS.
- Wright, D. L., Rolland, J. P., & Kancherla, A. R. (1995). Using virtual reality to teach radiographic positioning. *Radiologic Technology*, 66(4), 233-238.
- Wright, D. N. (1995). Interactive multimedia dental education: the next five years and beyond. *Medinfo*, 8(2), 1305-1307.
- Wright, H., Brodlie, K., & Brown, M. (1996). The Dataflow Visualization Pipeline as a Problem Solving Environment. In Proceedings of the 7th Workshop on Visualization in Scientific Computing, (pp. 267-276). : SpringerWien.
- Wright, J. R. (1997). Virtual Environments and Ergonomics: Needs and Opportunities. *Ergonomics*, 28, in press.
- Xenakis, S. N., Blakeslee, B. S., & Horner, J. A. (1996). Possibilities for Peacekeeping: The Role of Telemedicine in International Initiatives. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 257-263). Washington, DC: IOS Press.
- Xu, Y., & Ai, C. (1993). New Realistic 3D Surface Microtopography Visualization Technique. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 21-28). : SPIE.
- Xu, M., & Tang, Z. (1996). Two Computational Models for Animation of the Deformable Objects. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 151-155). : ACM.
- Yagel, R., & Ray, W. (1995). Visibility Computation for Efficient Walkthrough of Complex Environments. *Presence: Teleoperators and Virtual Environments*, 5(1), 45-60.
- Yagel, R., Stredney, D., Wiet, G. J., Schmalbrock, P., Rosenberg, L., Sessanna, D. J., Kurzion, Y., & King, S. (1996). Multisensory Platform for Surgical Simulation. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 79-85). : IEEE Computer Society Press.
- Yagel, R., Stredney, D., Wiet, G. J., Schmalbrock, P., Rosenberg, L., Sessanna, D. J., & Kurzion, Y. (1996). Building a virtual environment for endoscopic sinus surgery simulation. *Computers & Graphics*, 20(6), 813-823.
- Yam, P. (1993, February). Surreal Science: Virtual Reality Finds a Place in the Classroom. *Scientific American*(266), 103-104.

Yamabe, T., Yoshizawa, M., Nanka, S., Kobayashi, S., Takayasu, H., Takayasu, M., Tanaka, A., Abe, K., Sugiyama, Y., Iwase, S., Mano, T., & Nitta, S. (1996). Nonlinear Mathematical Analysis of the Heart Rate Variability During Virtual Immersion with Head Mounted Display. *Transactions of the Virtual Reality Society of Japan*, 1(1), 10-15.

Yamaguchi, H., Tatehira, Y., Akiyama, K., & Kobayashi, Y. (1989). Statistical Characteristics of Stereoscopic Images for Image Coding. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 135-142). : SPIE.

Yamaguchi, H., Tomono, A., & Kobayashi, Y. (1990). Proposal for a Large Visual Field Display Employing Eye Movement Tracking. In Proceedings of the Illumination and Image Sensing for Machine Vision IV, (pp. 13-20). : SPIE.

Yamaguchi, T., Furuta, N., Shindo, K., Hayasaka, T., Igarashi, H., Noritake, J., Yamazaki, K., & Yoshida, A. (1994). The Hyper Hospital: A Networked Reality Based Medical Care System. *IEICE Transactions on Information and Systems*, E77-D(9), 1372-1378.

Yamaguchi, T., Sugioka, Y., Tadatsu, S., Nakayama, T., Yamamoto, Y., Kobayashi, T., Takahashi, Y., Yamoka, N., Kinoshita, N., Nakanishi, Y., Hayasaka, T., Goto, G., Sudo, M., Kusaka, Y., & Yamazaki, K. (1995). The Hyper Hospital - Virtual Reality Based Medical System on the Computer Network - Its Concept and User-Configurable Virtual World Creating System. In Proceedings of the RO-MAN '95, IEEE International Workshop on Robot and Human Communication, (pp. 231-236). : IEEE.

Yamaguchi, T., Masubuchi, M., Tanaka, Y., & Yachida, M. (1996). Propagating Learned Behaviors from a Virtual Agent to a Physical Robot in Reinforcement Learning. In Proceedings of the ICEC '96: 1996 IEEE International Conference on Evolutionary Computation, (pp. 855-859). : IEEE.

Yamaguchi, T. (1996). Computational Visualization of Cardiovascular Blood Flow. In S. J. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 703-712). Washington, DC: IOS Press.

Yamaguchi, T., & Yamazaki, K. (1996). The Hyper Hospital: Virtual Reality-Mediated Networked Medical Care System. In S. Weghorst, J. B. Sieburg, & K. S. Morgan (Eds.), *Medicine Meets Virtual Reality: Health Care in the Information Age*, (pp. 220-238). Washington, DC: IOS Press.

Yamaguchi, T. (1996). Hyper Hospital on the Satellite Multi-Media Network. In M. K. S., H. M. Hoffman, D. Stredney, & S. J. Weghorst (Eds.), *Medicine Meets Virtual Reality: Global Healthcare Grid*, (Vol. 39, pp. 271-276). Washington, DC: IOS Press.

Yamakita, M., Negi, M., & Ito, K. (1994). Tele-Bilateral Impedance Control Using Bilinear Model. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 339-344). : IEEE.

Yamamoto, K., Ishiguro, A., & Uchikawa, Y. (1993). A Development of Dynamic Deforming Algorithms for 3D Shape Modeling with Generation of Interactive Force Sensation. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 505-511). : IEEE Service Center.

Yamamoto, H., Uchiyama, S., & Tamura-H. (1996). The Delaunay Triangulation for Accurate Three-Dimensional Graphic Model. *Systems and Computers in Japan*, 27(1), 58-68.

Yamashita, J., & Fukui, Y. (1993). A Direct Deformation Method. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 499-504). : IEEE Service Center.

- Yamashita, J., Yokoi, H., Fukui, Y., & Makoto, S. (1994). The Concept of Tool-Based Direct Deformation Method for Networked Cooperative CAD Interface. IEICE Transactions on Information and Systems, E77-D(12), 1350-1354.
- Yasuda, T., & Yokoi, S. (1992). Image Processing in Medicine. Journal of the Institute of Television Engineers of Japan, 46(11), 1467-1473.
- Yasuda, T., Yokoi, S., Ohshita, H., & Toriwaki, J.-I. (1992). 3D Visualization of an Ancient Egyptian Mummy. IEEE Computer Graphics and Applications, 12(3), 13-17.
- Yasuda, T., Suzuki, T., Yokoi, S., & Toriwaki, J. (1994). Virtual Environment Construction for Driving Simulator. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 50-55). : IEEE.
- Yeh, Y. Y., & Silverstein, L. D. (1992). Spatial judgements with monoscopic and stereoscopic presentation of perspective displays. Human Factors, 34(5), 583-600.
- Yeh, C.-P., & Wang, S. P. (1993). Cyclopean Stereo Vision for Depth Perception. In Proceedings of the Stereoscopic Displays and Applications IV, (pp. 117-122). : SPIE.
- Yei-Yu, Y., & Silverstein, L. D. (1989). Using Electronic Stereoscopic Color Displays: Limits of Fusion and Depth Discrimination. In Proceedings of the Three-Dimensional Visualization and Display Technologies, (pp. 196-204). : SPIE.
- Yoda, M., & Shiota, Y. (1993). GAME-ROBOT Which Prepared of Avoidance Motion. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 381-386). : IEEE.
- Yokoi, S., Yasuda, T., & Tokiwaki, J.-I. (1990). A Simulation System for Craniofacial Surgeries Based on 3D Image Processing. IEEE Engineering in Medicine and Biology, 9(4), 29-32.
- Yokoi, H., Yamashita, J., Fukui, Y., & Shimojo, M. (1994). Development of 3D-Input Device for Virtual Surface Manipulation. In Proceedings of the RO-MAN '94, 3rd IEEE International Workshop on Robot and Human Communication, (pp. 134-139). : IEEE.
- Yokoi, S. (1995). Interactive Manipulation of Virtual Objects. In Proceedings of the Second ATR Workshop on Virtual Space Teleconferencing, (pp. 58-88). : ATR International.
- Yokokohji, Y., Hollis, R. L., & Kanade, T. (1996). What You Can See is What You Can Feel--Development of Visual/Haptic Interface to Virtual Environment. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '96, (pp. 46-54). : IEEE Computer Society Press.
- Yokokohji, Y., Hollis, R. L., Kanade, T., Henmi, K., & Yoshikawa, T. (1996). Toward machine mediated training of motor skills. Skill transfer from human to human via virtual environment. In Proceedings of the RO-MAN'96: the 5th IEEE International Workshop on Robot and Human Communication, (pp. 32-37). : IEEE.
- Yonekura, T., N., A., & Watanabe, Y. (1993). ASPECT: Audio Spatial Environment for Communication - as a Three Dimensional Auditory Interaction Tool. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 183-187). : IEEE Service Center.
- Yonekura, T., Narisawa, R., & Watanabe, Y. (1996). A Proposal Of Five-Degree-Of-Freedom 3D Nonverbal Voice Interface. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, E79-A(2), 242-247.

Yoshida, A., Hagita, Y., Yamazaki, K., & Yamaguchi, T. (1993). Which Do You Feel Comfortable, Interview by a Real Doctor or by a Virtual Doctor?: A Comparative Study of Responses to Inquiries with Various Psychological Intensities, for the Development of the Hyper Hospital. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 370-374). : IEEE.

Yoshida, A., Noritake, J., Hayasaka, T., Suzuki, K., Suda, Y., Yakushiji, N., Yamazaki, K., & Yamaguchi, T. (1993). On the Concept of Hyper Hospital, a Medical Care System Distributedly Constructed on the Electronic Information Network. In Proceedings of the 2nd IEEE International Workshop on Robot and Human Communication, (pp. 365-369). : IEEE.

Yoshida, A., & Kakuta, J. (1994). Communicative Characteristics of Small Group Teleconferences in Virtual Environments. IEICE Transactions on Information and Systems, E77-D(9), 1385-1389.

Yoshida, A., Yamaguchi, T., & Yamazaki, K. (1994). Quantitative Study of Human Behavior in Virtual Interview Sessions for the Development of Hyper Hospital: A Network Oriented Virtual Reality Based Novel Medical Care SystemQ. IEICE Transactions on Information and Systems, E77-D(9), 1365-1371.

Yoshida, A., Rolland, J. P., & Reif, J. H. (1995). Design and Applications of a High-Resolution Insert Head-Mounted-Display. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 84-93). : IEEE Computer Society Press.

Yoshida, A., Rolland, J. P., & Reif, J. H. (1995). Optical Design and Analysis of a Head-Mounted Display with a High-Resolution Insert. In Proceedings of the Novel Optical Systems Design and Optimization, (pp. 71-82). : SPIE.

Yoshida, M., Tijerino, Y., Abe, S., & Kishion, F. (1995). A Virtual Space Teleconferencing System that Supports Intuitive Interaction for Creative and Cooperative Work. In Proceedings of the 1995 Symposium on Interactive 3D Graphics, (pp. 115-122). : ACM.

Yoshikawa, T., & Okamoto, T. (1996). Display of operating feel of virtual tools in rigid frictional contact with environment. Transactions of the Society of Instrument and Control Engineers, 32(5), 741-749.

Yost, G. (1994, January). Undocumented 3D Studio r3 Feat. 3D Artist(14), 34-36.

Youn, J.-H., & Wohn, K. (1993). Real-time Collision Detection for Virtual Reality Applications. In Proceedings of the EEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 415-421). : IEEE Service Center.

Young, J. M. (1994). Synthetic Environments for C3 Operations. Unpublished Master's thesis, Naval Postgraduate School.

Youngblut, C., Johnston, R. E., Nash, S. H., Wienclaw, R. A., & Will, C. A. (1996). Review of Virtual Environment Interface Technology (IDA Paper P-3186/AD-A314 134): Institute for Defense Analyses.

Zachmann, G. (1996). A Language for Describing Behavior of and Interaction with Virtual Worlds. In Proceedings of the ACM Symposium on Virtual Reality Software and Technology, (pp. 143-150). : ACM.

Zahrt, J. D., Papcun, G., Childers, R. A., & Rubin, N. (1996). Virtual Reality via Photogrammetry. In Proceedings of the Visual Data Exploration and Analysis III, (pp. 353-357). : SPIE.

Zamorano, L., Jiang, Z., Grosky, W. I., & Diaz, F. (1994). Telepresence and VR in Computer-Assisted Neurological Surgery: Basic Theory and a Prototype. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 63-66). : SIG-Advanced Applications, Inc.

Zamorano, L., Jiang, Z., Grosky, W. I., Kadi, M., & Diaz, F. (1995). Telepresence and Virtual Reality in Computer-Assisted Neurosurgery: Basic Thoery and a Prototype. *Journal of Medicine and Virtual Reality*, 1(1), 54-59.

Zarling, D. A., Golish, S. R., Calhoun, C. J., Fedor-Duys, V., Sands, D., Berns, M. D., & Karpati, R. L. (1992). Confocal Laser Scanning Microscopy and Digital Image Reconstruction in Virtual Environments for Gene Visualization with Fluorescent Probes. In Proceedings of the Virtual Worlds: Real Challenges - SRI's 1991 Conference on Virtual Reality, (pp. 89-110). : Meckler Publishing.

Zeleznik, R. C., Herndon, K. P., Robbins, D. C., Huang, N., Meyer, T., Parker, N., & Hughes, J. F. (1993). An Interactive 3D Toolkit for Constructing 3D Widgets. In Proceedings of the SIGGRAPH 93, (pp. 81-84). : ACM.

Zell, A., & Hubner, R. (1994). Low Cost-3D Visualization of Neural Networks. In Proceedings of the Virtual Reality '94: Anwendunger and Trends, (pp. 159-166). : Springer-Verlag.

Zeltzer, D., Pieper, S., & Sturman, D. (1989). An Integrated Graphical Simulation Platform. In Proceedings of the Graphics Interface '89, (pp. 266-274). : Canadian Information Processing Society.

Zeltzer, D. (1990). Virtual Environments: Where Are We Going? In Proceedings of the IDATE: 12th International Conference on Key Technologies, Experiments, New Concepts, (pp. 507-513). : IDATE.

Zeltzer, D. (1991). Task Level Graphical Simulation: Abstraction, Representation and Control. In N. Badler, B. Barsky, & D. Zeltzer (Eds.), *Making Them Move: Mechanics, Control and Animation of Articulated Figures*, (pp. 3-33). San Mateo, CA: Morgan Kauffmann.

Zeltzer, D. (1991). Virtual Environment Technology. In Proceedings of the Extracting Meaning from Complex Data: Processing, Display, Interaction II, (pp. 86-87). : SPIE.

Zeltzer, D., & Johnson, M. B. (1991). Motor Planning: an Architecture for Specifying and Controlling the Behaviour of Virtual Actors. *Journal of Visualization and Computer Animation*, 2(2), 74-80.

Zeltzer, D. (1992). Autonomy, Interaction, and Presence. *Presence: Teleoperators and Virtual Environments*, 11127-132.

Zeltzer, D. (1992). A Virtual Environment System for Mission Planning. In Proceedings of the 1992 IMAGE Conference VI, (pp. 125-136). : IMAGE Society.

Zeltzer, D., Pioch, N. J., & Aviles, W. A. (1995). Training the officer of the deck. *IEEE Computer Graphics and Applications*, 15(6), 6-9.

Zeltzer, D., & Pioch, N. J. (1996). Validation and verification of a virtual environment for training naval submarine officers. In Proceedings of the Stereoscopic Displays and Virtual Reality Systems III, (pp. 320-331). : SPIE.

Zeltzer, D., & Pioch, N. J. (1996). Validation and verification of virtual environment training systems. In Proceedings of the IEEE 1996 Virtual Reality Annual International Symposium, (pp. 123-130). : IEEE Computer Society Press.

Zeltzer, D., & Gaffron, S. (1996). Task-level interaction with virtual environments and virtual actors. *International Journal of Human-Computer Interaction*, 8(1), 73-94.

Zerkus, M., Becker, B., Ward, J., & Halvorsen, L. (1994). Temperature Feedback in Virtual Reality Systems. In Proceedings of the Virtual Reality and Medicine: The Cutting Edge, (pp. 141-146). : SIG-Advanced Applications, Inc.

Zerkus, M., Becker, B., Ward, J., & Halvorsen, L. (1994). Thermal Feedback in Virtual Reality and Telerobotic Systems. In Proceedings of the ISMCR'94: Topical Workshop on Virtual Reality, (pp. 107-113). : NASA.

Zeswitz, S. (1993). NPSNET: Integration of Distributed Interactive Simulation (DIS) Protocol for Communication Architecture and Information Interchange. Unpublished Unpublished Master's Thesis, Monterey, CA: Naval Postgraduate School.

Zhai, S. (1993). Investigation of Feel for 6DOF Inputs: Isometric and Elastic Rate Control for Manipulation in 3D Environments. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting Designing for Diversity, (pp. 323-327). : Human Factors Society.

Zhai, S., & Milgram, P. (1993). Human Performance Evaluation of Manipulation Schemes in Virtual Environments. In Proceedings of the IEEE 1993 Virtual Reality Annual International Symposium, VRAIS '93, (pp. 155-161). : IEEE Service Center.

Zhai, S., & Milgram, P. (1993). Human Performance Evaluation of Isometric and Elastic Rate Controllers in a 6 DOF Tracking Task. In Proceedings of the Telemanipulator Technology, (pp. 130-141). : SPIE.

Zhai, S., & Milgram, P. (1994). Asymmetrical Spatial Accuracy in 3D Tracking. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 245-249). : Human Factors and Ergonomics Society.

Zhai, S., Buxton, W., & Milgram, P. (1994). The "Silk Cursor": Investigating Transparency for 3D Target Acquisition. In Proceedings of the CHI '94: Human Factors in Computing Systems "Celebrating Interdependence", (pp. 459-464, 483). : ACM.

Zhai, S., Buxton, W., & Milgram, P. (1996). The Partial-Occlusion Effect: Utilizing Semitransparency in 3D Human-Computer Interaction. *ACM Transactions on Computer-Human Interaction*, 3(3), 254-284.

Zhai, S., Milgram, P., & Buxton, W. (1996). The Influence of Muscle Groups on Performance of Multiple Degree-of-Freedom Input. In Proceedings of the CHI '96: ACM conference on Human Factors in Computing Systems, (pp. 308-315). : ACM.

Zhai, S. (1996). Human Performance in Six Degree of Freedom Input Control. Unpublished Ph.D. Thesis, University of Toronto: Ergonomics in Teleoperaion and Control Lab, Department of Industrial Engineering.

Zhang, X., Liu, Y., & Chaffin, D. B. (1994). Frame of Reference in Posture Specification for Computer-Aided Ergonomic Analysis. In Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, (pp. 290-294). : Human Factors and Ergonomics Society.

Ziegler, R., Mueller, W., Fischer, G., & Goebel, M. (1995). A virtual reality medical training system. In Proceedings of the CVRMed '95: Computer Vision, Virtual Reality and Robotics in Medicine, (pp. 282-286). : Springer-Verlag.

Ziegler, R., Fischer, G., Muller, W., & Göbel, M. (1995). Virtual reality arthroscopy training simulator. *Computers in Biology and Medicine*, 25(2), 193-203.

- Zimmerman, T., Lanier, J., Blanchard, C., Bryson, S., & Harvil, Y. (1987). A Hand Gesture Interface Device. In Proceedings of the CHI and GI, (pp. 189-192). : ACM.
- Zimmerman, T. G., Smith, J. R., Paradiso, J. A. A., D., & Gershenfeld, N. (1995). Applying Electric Field Sensing to Human-Computer Interfaces. In Proceedings of the Human Factors in Computing Systems, CHI '95: Mosaic of Creativity, (pp. 280-287). : ACM.
- Zobel, R. W., Jr. (1995). The Representation of Experience in Architectural Design. *Presence: Teleoperators and Virtual Environments*, 4(3), 254-266.
- Zuiderveld, K. J. (1996). VR in Radiology: First Experiences at University Hospital Utrecht. *Computer Graphics [Focus: "Real" Virtual Reality]*, 30(4), 47-48.
- Zuiderveld, K. J., Koning, A. H. J., Stokking, R., Maintz, J. B. A., Appelman, F. J. R., & Viergever, M. A. (1996). Multimodality visualization of medical volume data. *Computers & Graphics*, 20(6), 775-791.
- Zwern, A. L., & Clark, M. R. (1995). Virtual Computer Monitor for Visually Impaired Users. In R. M. Satava, K. Morgan, H. B. Sieburg, R. Mattheus, & J. P. Christensen (Eds.), *Interactive Technology and the New Paradigm for Healthcare*, (pp. 406-414). Amsterdam: IOS Press.
- Zyda, M. J. (1990). 3D Visual Simulation for Graphics Performance Characterization. In Proceedings of the National Computer Graphics Association, NCGA '90, (pp. 705-714). : NCGA.
- Zyda, M. J., McGhee, R. B., McConkle, C. M., Nelson, A. H., & Ross, R. S. (1990). A Real-Time, Three-Dimensional Moving Platform Visualization Tool. *Computers and Graphics*, 14(2), 321-333.
- Zyda, M. J., Monahan, J. G., & Pratt, D. R. (1992). NPSNET: Physically-Based Modeling Enhancements to an Object File Format. In N. M. Thalmann & D. Thalmann (Eds.), *Creating and Animating the Virtual World*, (pp. 35-52). Tokyo, Japan: Springer Verlag.
- Zyda, M. J., Pratt, D. R., Monahan, J. G., & Wilson, K. P. (1992). NPSNET: Constructing a 3D Virtual World. In Proceedings of the 1992 Symposium on Interactive 3D Graphics, (pp. 147-156). : ACM.
- Zyda, M. J., Lombardo, C., & Pratt, D. R. (1993). Hypermedia and Networking in the Development of Large-Scale Virtual Environments. In Proceedings of the ICAT '93: the Third International Conference on Artificial Reality and Tele-Existence, (pp. 33-40). : Japan Technology Transfer Association.
- Zyda, M. J., Osborne, W. D., Monahan, J. G., & Pratt, D. R. (1993). NPSNET: Real-Time Collision Detection and Response. *The Journal of Visualization and Computer Animation [special issue on Simulation and Motion Control]*, 4(1), 13-24.
- Zyda, M. J., Pratt, D. R., Falby, J. S., & Mackey, R. L. (1993). NPSNET: Hierarchical Data Structures for Real-Time Three-Dimensional Visual Simulation. *Computers and Graphics*, 17(1), 65-69.
- Zyda, M. J., Pratt, D. R., Falby, J. S., Lombardo, C., & Kelleher, K. M. (1993). The Software Required for the Computer Generation of Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 2(2), 130-140.
- Zyda, M. J., Wilson, K. P., Pratt, D. R., Monahan, J. G., & Falby, J. S. (1993). NPSOFF: An Object Description Language for Supporting Virtual World Construction. *Computers and Graphics*, 17(4), 457-464.

Zyda, M., Pratt, D., Falby, J., Barham, P., & Kelleher, K. (1993). NPSNET and the Naval Postgraduate School Graphics and Video Laboratory. *Presence: Teleoperators and Virtual Environments*, 2(3), 244-258.

Zyda, M. J., Pratt, D. R., Falby, J. S., Barham, P. T., & Kelleher, K. M. (1994). NPSNET and the Naval Postgraduate School Graphics and Video Laboratory. *Presence: Teleoperators and Virtual Environments*, 2(3), 244-258.

Zyda, M., & Macedonia, M. (1994). Special Issue on Networked Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 3(4).

Zyda, M., Gossweiler, R., Morrison, J., Singhal, S., & Macedonia, M. (1995). Panel: Networked Virtual Environments. In Proceedings of the Virtual Reality Annual International Symposium, VRAIS '95, (pp. 230-231). : IEEE Computer Society Press.

Zyda, M. (1995). Networked Virtual Environments. In Proceedings of the 1995 IEEE Virtual Reality Annual International Symposium, (pp. 230-231). : IEEE.

Zyda, M. J., Pratt, D. R., Pratt, S. M., Barham, P. T., & Falby, J. S. (1995). NPSNET-HUMAN: Inserting the Human into the Networked Synthetic Environment. In Proceedings of the 13th DIS Workshop, (pp. unpaginated). : Naval Postgraduate School.

Zyda, M. J. (1996). Networking Large-Scale Virtual Environments. In Proceedings of the Computer Animation '96, (pp. 1-4). : IEEE Computer Society Press.