LIST OF ACRONYMS AND ABBREVIATIONS

2-D Two-Dimensional3-D Three-Dimensional

AIST Agency of Industrial Science and Technology
ALIVE Artificial Life Interaction Video Environment

ARC Artificial Reality Corporation
ARL Army Research Laboratory
ARM Argonne Remote Manipulator

ARPA Advanced Research Projects Agency

CAD Computer-Aided Design
CCD Charge Coupled Device

CGSD Computer Graphics Systems Development

CRT Cathode Ray Tube

DARPA Defense Advanced Research Projects Agency
DIBBL Dismounted Infantry Battlespace BattleLab

DDL Denne Development Limited

DIS Distributed Interactive Simulation

DNA Deoxyribonucleic acid
DoD Department of Defense
DPI Dual-Purkinje-Image
DSP Digital Signal Processing

DTSS Displaced Temperature Sensing System

DOF Degree of Freedom

EAM Exoskeleton ArmMaster

EOG Electrooculogram
EPI Epipolar-Plane Image
EVA Extra Vehicular Activity

FITE Fusion Interfaces for Tactical Environments

FTFS Force and Tactile Feedback System

GUI Graphical User Interface

HAPTAC HAPtic-TACtile

HDVD High Definition Volumetric Display
HEHD Hand Exoskeleton Haptic Display

HHT Head Hand XYZ Tracker

HITL Human Interface Technology Laboratory

HMD Head-Mounted Display

HRTF Head-Related Transfer Function
IID Interaural Intensity Difference
IIT Interaural Time Difference

INTERACT Interactive Systems Laboratory

IPD Inter-Pupil Distance
IPORT Individual Portal

IR Infra-Red

ISMS Intelligent Soldier Mobility Simulator

JND Just-Noticeable-Difference JPL Jet Propulsion Laboratory

LCD Liquid Crystal Diode
LED Light Emitting Diode
MAF Minimum Audible Field
MAP Minimum Audible Pressure

MCP Metacarpophalangeal

MIT Massachusetts Institute of Technology

MITI Ministry of International Trade and Industry

MSR Microsurgical Robot nM Nanomanipulator

NASA National Aeronautics and Space Administration

NAWCTSD Navy Air Warfare Center Training Systems Division

NPSNET Naval Postgraduate School Networked Vehicle Simulator

NSF National Science Foundation PAS Polyphonic Audio Spatializer

PDMFF Portable Dextrous Master with Force Feedback

PemRAM Precision Electromagnetic RAM

PIP Proximal Interphalangeal
PMP Personal Motion Platform

PUSH Personal Use Stereoscopic Haptic

RM Rutgers Master

SBIR Small Business Innovation Research

SMA Shape Memory Alloy

SMART Simultaneous Multiple Area Recognition and Tracking

SPIDAR Spatial Interface Device for Artificial Reality

STRICOM Simulation Training and Instrumentation Command

TRP Technology Reinvestment Program

UNC University of North Carolina

US United States

VAPS Virtual Audio Processing System

VE Virtual Environment

VEIL Virtual Environment Interface Laboratory

VR-B Virtual Binoculars

WPAFB Wright Patterson Air Force Base