

## **Robert O. Ambrose, Ph.D.**

### **Professional Preparation**

University of Texas at Austin  
University of Texas at Austin

Ph.D. Mech. Eng. 1987-1991  
Post Doctoral 1991-1992



### **NASA Assignment**

Dr. Ambrose has a 30-year career spanning work in academia, industry, and the government, with demonstrated technical leadership, personnel supervision, organizational strategy, partnerships and collaboration, fiducial stewardship, technological vision, thought leadership, schedule execution and product delivery. Recognized as an international leader in robotics and autonomous systems, he manages organizations of over 400 engineers and budgets over \$80 million per year. He manages robots on the International Space Station (ISS) with assembly completed in space, software and simulations for the Orion Spacecraft, and the development of exercise equipment, wearable robotics and jetpacks used by astronauts in space. He led the design of futuristic systems like Robonaut, the Chariot rover, Centaur, Valkyrie, MRV, Resource Prospector rovers, and the X1 exoskeleton that are paving the way for space exploration.

### **Previous NASA Experience**

Division Chief, Software, Robotics and Simulation Division, NASA JSC	2009-present
STMD Principle Technologist, NASA HQ	2011-2018
NASA Lead for the National Robotics Initiative, NASA HQ	2011-2019
Project Manager, Human Robotics Systems Project, NASA JSC	2007-2011
Deputy Division Chief, Software, Robotics and Simulation Division, NASA JSC	2008-2009
Assistant Division Chief, Software, Robotics & Simulation Division, NASA JSC	2007-2008
Branch Chief, Robotics Systems Technology Branch, NASA JSC	2003-2007
ROBONAUT-Project Leader, NASA Johnson Space Center,	1999-2003

### **Metrica, Inc. Experience**

ROBONAUT-Arm Subsystem Lead,	1996-1999
BioPlex Automation System, Principal Investigator	1996-1999
Harmonic Drive Test Initiative, Project Leader	1994-1996

### **MITRE Corporation Experience**

Space Modular Manipulators, Project Leader, MITRE Corporation	1992-1994
Modular System Design Methodologies, Project Leader, MITRE Corporation	1993-1994