

# RICHARD J. MASON

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## EDUCATION

**California Institute of Technology** Department of Mechanical Engineering  
Ph.D. June 2003 GPA 4.0/4.0  
National Science Foundation Graduate Fellow  
Dissertation: *Fluid Locomotion and Trajectory Planning for Shape-Changing Robots*

**Harvard University** Department of Physics  
B.A. June 1992 *Magna cum laude*  
National Merit Scholar, Robert C. Byrd Scholar, Engineers' Club of Dallas Scholar

GRE Verbal 800/800, Quantitative 800/800, Analytical 800/800. GRE Physics 880/990. LSAT 180/180.

## PROFESSIONAL EXPERIENCE

**RAND Corporation** Technology and Applied Sciences  
Engineer 2002-present  
Research areas: Unmanned ground and aerial vehicles, satellites, railguns, infrared sensing.

**The Golem Group LLC**  
CEO / Team Leader 2003-present  
Research area: DARPA Grand Challenge for Autonomous Ground Vehicles.

**University of California, Los Angeles (UCLA)** Department of Computer Science  
Lecturer, Computer Science 269, Current Topics in Artificial Intelligence Spring 2005

**California Institute of Technology** Department of Mechanical Engineering  
Graduate Research Assistant, Robotics Laboratory 1994-2002

**NASA Jet Propulsion Laboratory** Advanced Concepts Office  
Independent Consultant on feasibility of "aerobot" probes for gas-giant planets. 1996

**Harvard University** Division of Engineering and Applied Science  
Teaching Fellow, Computer Science 128, Data Structures and Algorithms 1990-1992  
Head Teaching Fellow, Quantitative Reasoning 1990-1991

**Microsoft Corporation** Systems Division  
Software Design Engineer (Intern) Summer 1991

## SELECTED PUBLICATIONS

Richard Mason, Jim Radford, Deepak Kumar, Robert Walters, Brian Fulkerson, Eagle Jones, David Caldwell, Jason Meltzer, Yaniv Alon, Amnon Shashua, Hiroshi Hattori, Nobuyuki Takeda, Emilio Frazzoli, and Stefano Soatto, "The Golem Group / UCLA Autonomous Ground Vehicle in the DARPA Grand Challenge," *Journal of Field Robotics*, Volume 23, Number 8, August 2006.

Richard Mason and Joel Burdick, "Trajectory Planning Using Reachable State Density Functions," 2002 IEEE International Conference on Robotics and Automation, Washington, D.C., 2002.