



## Jonathan P. How

Richard Cockburn Maclaurin Professor of Aeronautics and Astronautics

### Contact

Department of Aeronautics and Astronautics  
33-326

Massachusetts Institute of Technology  
77 Massachusetts Avenue, Cambridge, MA 02139

(617) 253-3267

[jhow@mit.edu](mailto:jhow@mit.edu)

**Website:** <http://www.mit.edu/people/jhow/>

### Academic Degrees

B.A.Sc., 1987, University of Toronto S.M., 1990, Massachusetts Institute of Technology Ph.D., 1993, Massachusetts Institute of Technology

### Honors and Awards

2012 — recipient of the AIAA Best Paper Award from the 2011 Guidance Navigation and Control Conf. by the AIAA Guidance, Navigation and Control Technical Committee for the paper "Decentralized Information-Rich Planning and Hybrid Sensor Fusion for Uncertainty Reduction in Human-Robot Missions" by S. Ponda et al.; 2011 — Awarded prize for the "Best Applications paper published in Automatica over the past three years" for paper H.L. Choi and J.P. How, "Continuous trajectory planning of mobile sensors for informative forecasting," Vol. 46, Issue 8, Pages 1266-1275; 2011 — National Instruments Graphical System Design Achievement Award (Education category); 2009 — appointed Richard C. Maclaurin Professor of Aeronautics and Astronautics at MIT; 2008 — Boeing Special Invention Award; 2007 — Best Paper Presentation at 100th Meeting of the Aerospace Control and Guidance Systems Committee; 2006-2008 - Raymond L. Bisplinghoff Fellow for MIT AeroAstro Department; 2000-2002 — Boeing Associate Professor, MIT; 2002 — Burka Award for outstanding achievement in the preparation of papers contributing to the advancement of navigation and space guidance; 1997-1999 — Charles Powell Faculty Scholar, Stanford Univ.; 1995 - NASA Certificate of Appreciation for MACE; 1994-1997 — Davis Faculty Scholar, Stanford University.

#### Society Memberships

American Institute of Aeronautics and Astronautics, Associate Fellow;  
Institute of Electrical and Electronics Engineers, Senior Member

#### Positions Held at MIT

7/09 - present Richard C. Maclaurin Professor of Aeronautics and Astronautics

7/07 - 6/09 Professor of Aeronautics and Astronautics, MIT

4/00 - 6/07 Associate Professor, Department of Aeronautics and Astronautics, MIT, (Tenured in 2003)

2/93 - 8/94 PostDoctoral Associate, Department of Aeronautics and Astronautics, MIT

#### Specialization and Research Interests

Navigation and control; design and implementation of distributed robust planning algorithms to coordinate multiple autonomous vehicles in dynamic uncertain environments; adaptive flight control to enable autonomous agile flight and aerobatics; experimental and theoretical robust control

#### Teaching Interests

Feedback control, navigation and estimation, optimal control

## Lab/Research Group Affiliation:

Aerospace Controls Laboratory

Laboratory for Information and Decision Systems

Space Systems Laboratory

▶ [About](#)

▶ [Academics](#)

▶ [Admission](#)

▶ [Faculty & Research](#)

▶ [Videos](#)

▶ [News & Events](#)

◦ [Alumni](#)



Massachusetts Institute  
of Technology

Department of Aeronautics and Astronautics

77 Massachusetts Avenue :: 33-207 :: Cambridge MA 02139 USA

[Contact Us](#) :: [Search](#)



◦ [About](#)

◦ [Academics](#)

◦ [Admission](#)

◦ [Faculty & Research](#)

◦ [Videos](#)

◦ [News & Events](#)

◦ [Alumni](#)