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Aeronautics and Astronautics
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Current Position

Associate Professor, Aeronautics and Astronautics, 2005 - present

Employment history

Lecturer, Department of Electrical Engineering-Systems, University of Southern California, 1997-1998
Lecturer, Department of Control and Dynamical Systems, California Institute of Technology, 1998-1999
Member of Technical Staff, Jet Propulsion Laboratory, California Institute of Technology, 1996-2000
Assistant Professor, Aerospace Engineering and Mechanics, University of Minnesota, 2000-2002
Assistant Professor, Aeronautics and Astronautics, University of Washington, 2002-2005

Education

California State University, BS (Summa Cum Laude), 1989
University of Southern California, MSEE, 1991
University of Southern California, MSMath, 1995
University of Southern California, Ph.D., 1996

Awards

University of Washington College of Engineering Innovator Award for Teaching, 2008
University of Washington Distinguished Teaching Award, 2005
Professor of the Year, Aeronautics and Astronautics, University of Washington (2004, 2006)
NASA Space Act Award, 2004
NSF CAREER Award, 2001

Selected Publications

1. A. Rahmani, M. Ji, M. Mesbahi, and M. Egerstedt. Controllability of multi-agent systems from a graph-theoretic perspective, *SIAM Journal on Control and Optimization*, (48) 1:162-186, 2009.
2. A. Rahmani and M. Mesbahi. Controlled agreement over networks: anchoring, controllability, and graph automorphisms, *American Control Conference*, 2007.
3. A. Das and M. Mesbahi. Distributed parameter estimation in sensor networks, *IEEE Conference on Sensor, Mesh, and Ad Hoc Communications and Networks*, 2006.
4. Y. Hatano and M. Mesbahi. Agreement over random networks, *IEEE Transactions on Automatic Control*, (50) 11: 1867-1872, 2005.
5. M. Mesbahi, On state-dependent dynamic graphs and their controllability properties, *IEEE Transactions on Automatic Control*, (50) 3: 387- 392, 2005.
6. Y. Kim and M. Mesbahi, Quadratically constrained attitude control via semidefinite programming, *IEEE Transactions on Automatic Control*, (49) 5: 731 – 735, 2004.
7. J. Sandhu, M. Mesbahi, and T. Tsukamaki. Cuts and flows in relative sensing and control of spatially distributed systems, *American Control Conference*, 2005.
8. Y. Kim, M. Mesbahi, and F. Y. Hadaegh, Multiple-spacecraft reconfigurations through collision avoidance, bouncing, and stalemates, *Journal of Optimization Theory and its Applications*, (122) 2: 323-343, 2004.
9. Y. Shao, M. Mesbahi, and G. Balas. Planing, switching, and supercavitating flight control, *AIAA Guidance, Navigation, and Control Conference*, August 2003.
10. Y. Kim, M. Mesbahi, and F. Y. Hadaegh, Dual spacecraft formation flying: optimal collision-free reconfigurations, *Journal of Guidance, Navigation, and Control*, (26): 2, 375-379, 2003.
11. M. Mesbahi and F. Y. Hadaegh, Graphs, matrix inequalities, and switching for the formation flying of multiple spacecraft, *AIAA Journal of Guidance, Control, and Dynamics*, 24 (3): 369-377, 2001.
12. M. Mesbahi and G. P. Papavassilopoulos. On the rank minimization problem over a positive semidefinite linear matrix inequality, *IEEE Transactions on Automatic Control*, (42) 2: 239 – 243, 1997.