Gürdal Arslan, Associate Professor

Education

- Ph.D. in Electrical Engineering, University of Illinois at Urbana-Champaign, October 2001.
- M.S. in Electrical Engineering, Pennsylvania State University, 1996.
- B.S. in Electrical Engineering, Istanbul Technical University, Turkey, 1990.

Academic Experience

- 08/08—present, Associate Professor, Dept. of Electrical Engineering, University of Hawaii.
- 08/04—07/08, Assistant Professor, Dept. of Electrical Engineering, University of Hawaii.
- 03/02—07/04, Assistant Researcher, Dept. of Mechanical & Aerospace Engineering, UCLA.
- 10/01—02/02, Visiting Assistant Researcher, Dept. of Mechanical & Aerospace Eng., UCLA.

Non-Academic Experience: 02/01—09/01, Control Researcher, Voyan Tech., Santa Clara, CA.

Membership in Professional Organizations: IEEE, Control Systems Society

Honors and Awards: National Science Foundation CAREER Award

Service Activities

- UH Graduate Council since Fall 2013.
- EE Graduate Chair since Fall 2012.
- Member of COE ABET Committee for May 1, 2007 Spring 2009.
- Member of EE ABET (national EE accreditation board) Committee for Spring 2005 Spring 2009 (Co-Chair for January 7, 2006 Spring 2009).
- Member of Department of Electrical Engineering Graduate Committee since Fall 2005.
- Member of Department of Electrical Engineering Personnel Committee for Fall 2009-Fall 2010.
- EE Faculty Representative in COE Lab Fees Committee Spring 2010-Fall 2010 and Fall 2011-Spring 2012.
- Local Arrangement Chair, IEEE Conference on Decision and Control 2012, Maui, Hawaii.
- Served on conference program committees
- Reviewer for journals and conferences
- Reviewer of textbook "Linear System Theory and Design" 3rd Edition by Chen, Oct. 2006.
- Served on five National Science Foundation Review Panels, February 2006, June 2006, February 2008, March 2009, December 2011.

Publications and Presentations

Chapters in Books

1. J. S. Shamma and G. Arslan. "Dimensions of cooperative control", J. S. Shamma, editor, *Cooperative Control of Distributed Multi-Agent Systems*, pages 3-18. John Wiley & Sons, England, 2008, ISBN-13 978-0-470-06031-5.

Journal papers

- 1. G. Arslan, M. F. Demirkol and S. Yüksel, "On games with coupled constraints", accepted, *IEEE Transactions on Automatic Control*, July 25, 2014.
- 2. J. R. Marden, G. Arslan and J. S. Shamma, "Cooperative control and potential games", *IEEE Transaction on Systems, Man, and Cybernetics—Part B: Cybernetics*, Volume 39, Issue 6, December 2009, pp. 1393-1407.
- 3. J. R. Marden, G. Arslan and J. S. Shamma, "Joint strategy fictitious play with inertia for potential games", *IEEE Transaction on Automatic Control*, Volume 54, Issue 2, February 2009, pp. 208-220.
- 4. J. R. Marden, H. P. Young, G. Arslan, and J. S. Shamma, "Payoff based dynamics for multiplayer weakly acyclic games", *SIAM Journal on Control and Optimization*, Volume 48, Issue 1, 2009, pp.373-396.
- 5. G. Arslan, M. F. Demirkol and Y. Sang, "Equilibrium efficiency improvement in MIMO interference systems: A decentralized stream control approach", *IEEE Transactions on Wireless Communications*, Volume 6, Issue 8, August 2007, pp. 2984-2993.
- 6. G. Arslan, J. S. Shamma and J. R. Marden, "Autonomous Vehicle-Target Assignment: A Game Theoretical Formulation", *ASME Journal of Dynamic Systems, Measurement and Control*, Volume 129, Issue 5, September 2007, pp. 584-596.
- 7. S. Mannor, J. S. Shamma and G. Arslan, "Online Calibrated Forecasts: Efficiency versus Universality for Learning in Games", *Machine Learning*, Volume 67, Numbers 1-2, May 2007, pp. 77-115.
- 8. J. S. Shamma and G. Arslan, "A Decomposition Approach to Distributed Control of Spatially Invariant Systems", *IEEE Transactions on Automatic Control*, Volume 51, Issue 4, April 2006, pp. 701-707.
- 9. J. S. Shamma and G. Arslan, "Dynamic fictitious play, dynamic gradient play, and distributed convergence to Nash equilibria", *IEEE Transactions on Automatic Control*, Volume 50, Issue 3, March 2005, pp. 312-327.
- 10. J. S. Shamma and G. Arslan, "Unified convergence proofs of continuous-time fictitious play", *IEEE Transactions on Automatic Control*, Volume 49, Issue 7, July 2004, pp. 1137-1142.
- 11. G. Arslan and T. Başar, "Decentralized Risk-Sensitive Controller Design for Strict-Feedback Systems", *the Systems & Control Letters*, Volume 50, Issue 5, 2003, pp. 383-393.
- 12. G. Arslan and T. Başar, "Risk-Sensitive Adaptive Trackers", *IEEE Transactions on Automatic Control*, Volume 47, Issue 10, October 2002, pp. 1754-1758.
- 13. G. Arslan and T. Başar, "Disturbance attenuating controller design for strict-feedback systems with structurally unknown dynamics", Automatica, 37, 2001, pp. 1175-1188.

Conference papers

• Twenty-three (five since August 2007) refereed papers published in conference proceedings.

Professional Development Activities

- 01/11—05/11, Visiting Scholar, the Cox School of Business, Southern Methodist University.
- Summer 2003, University of Florida, Graduate Engineering Research Center, Shalimar, FL.