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LIST OF PUBLICATIONS

Currently Under Review

1. D. Chatterjee, P. Hokayem, and J. Lygeros, "Stochastic receding horizon control with bounded inputs: A vector space approach," *IEEE Transactions on Automatic Control*.
2. G. Chaloulos, P. Hokayem, J. Jygeros, "Optimization-based hierarchical control for prioritized conflict resolution: A case study," 9th USA/EUROPE Air Traffic Management Research & Development Seminar, 2011.
3. G. Chaloulos, P. Hokayem, J. Jygeros, "Hierarchical MPC with priorities for conflict resolution in air traffic control," IFAC World Congress, 2011.
4. A. Cherukuri, D. Chatterjee, P. Hokayem, J. Jygeros, "Stochastic receding horizon control: a comparative study and stability results," IFAC World Congress, 2011.

Journal Articles

1. P. Hokayem, E. Cinquemani, D. Chatterjee, F. Ramponi, and J. Lygeros, "Stochastic MPC with output feedback and bounded inputs," *Automatica*, provisionally accepted.
2. F. Ramponi, D. Chatterjee, A. Miliadis-Argeitis, P. Hokayem, J. Lygeros, "Attaining mean square boundedness of a neutrally stable noisy linear system with a bounded control input," *IEEE Transactions on Automatic Control*, vol. 55, no. 10, pp.2412-2418, October 2010.
3. P. Hokayem, D. M. Stipanović, M. W. Spong, "Coordination and collision avoidance for Lagrangian systems with disturbances," *Journal of Applied Mathematics and Computation*, vol. 217, no. 3, pp. 1085-1094, October 2010.
4. P. Hokayem, D. M. Stipanović, and M. W. Spong, "Semiautonomous control of multiple networked lagrangian systems," *International Journal of Robust and Nonlinear Control*, vol. 19, no. 18, pp. 2040-2055, December 2009.
5. P. Hokayem and K. Schilling, "Input-to-state stable attitude control," *AIAA Journal of Guidance, Control, and Dynamics*, vol. 31, no. 6, pp. 1826-1829, November-December 2008.
6. D. M. Stipanović, P. Hokayem, M. W. Spong, and D. D. Šiljak, "Avoidance control for multi-agent systems," *ASME Journal of Dynamic Systems, Measurement, and Control*, vol. 129, no. 5, pp. 699-707, September 2007.
7. P. Hokayem and M. W. Spong, "Bilateral teleoperation: An historical survey," *Automatica*, vol. 42, no. 12, pp. 2035-2057, December 2006. (**Automatica Prize Paper Award**)

Book Chapters

8. P. Hokayem, S. Mastellone, and C. T. Abdallah, "Nonlinear systems stability via random and quasi-random methods," in *Probabilistic and Randomized Methods for Design under Uncertainty*, G. Calafiore and F. Dabbene eds., Springer-Verlag, 2006.
9. S. C. Bengea, P. Hokayem, R. A. DeCarlo, and C. T. Abdallah, "Suboptimal control techniques for networked hybrid systems," *Advances in Communication Control Networks*, S. Tarbouriech, C. T. Abdallah and J. Chiasson eds., Lecture Notes in Control and Information Sciences, Vol. 308, Springer-Verlag, 2004.

Conference Papers

10. P. Hokayem, E. Cinquemani, D. Chatterjee, F. Ramponi, J. Lygeros, "Stochastic receding horizon control with output feedback and bounded control inputs," *IEEE Conference on Decision and Control*, Atlanta GA, USA, December 2010.
11. D. Chatterjee, S. Amin, P. Hokayem, J. Lygeros, S. Sastry, "Mean-square boundedness of stochastic networked control systems with bounded control inputs," *IEEE Conference on Decision and Control*, Atlanta GA, USA, December 2010.
12. P. Hokayem, E. Cinquemani, D. Chatterjee, J. Lygeros, "Stochastic MPC with imperfect state information and bounded controls," *UKACC International Conference on Control*, Coventry, UK, September 2010.
13. P. Hokayem, D. Chatterjee, F. Ramponi, G. Chaloulos, and J. Lygeros, "Stable stochastic receding horizon control of linear systems with bounded control inputs," *International Symposium on Mathematical Theory of Networks and Systems (MTNS)*, Budapest, Hungary, July 2010.
14. G. Chaloulos, P. Hokayem, J. Lygeros, "Distributed hierarchical MPC for conflict resolution in air traffic," *American Control Conference*, Baltimore, Maryland, USA, June-July 2010.
15. P. Hokayem, D. Chatterjee, and J. Lygeros, "On stochastic receding horizon control with bounded inputs," *IEEE Conference on Decision and Control*, Shanghai, China, December 2009.
16. D. M. Raimondo, P. Hokayem, J. Lygeros, M. Morari, "An iterative decentralized MPC algorithm for large-scale nonlinear systems," 1st IFAC Workshop on Estimation and Control of Networked Systems (Nec-Sys'09), Venice, Italy, September 2009.
17. P. Hokayem, D. M. Stipanović, and M. W. Spong, "On persistent coverage control," *IEEE Conference on Decision and Control*, New Orleans, LA, December 2007
18. P. Hokayem, D. M. Stipanović, and M. W. Spong, "Reliable control of multi-agent formations," *American Control Conference*, New York, NY, July 2007.
19. P. Hokayem, D. M. Stipanović, and M. W. Spong, "Dynamic coverage control with limited information," *American Control Conference*, New York, NY, July 2007.
20. P. Hokayem and M. W. Spong, "Stability of quantized and delayed bilateral teleoperators," *IEEE Conference on Decision and Control*, San Diego, CA, December 2006.
21. P. Hokayem, D. M. Stipanović, and M. W. Spong, "Suboptimal master-slave teleoperation control with delays," *American Control Conference*, Minneapolis MN, June 2006.
22. S. C. Bengea, P. Hokayem, R. A. DeCarlo, and C. T. Abdallah, "Suboptimal control techniques for networked hybrid systems," *IEEE Conference on Decision and Control*, Atlantis, Paradise Island, Bahamas, December 2004.
23. P. Hokayem and C. T. Abdallah, "Inherent issues in networked control systems: A survey," *American Control Conference*, Boston, MA, June 30 - July 2 2004.
24. P. Hokayem, C. T. Abdallah, P. Dorato, and S. Mastellone, "An overview of quasi-Monte Carlo in control systems," *International Symposium on Mathematical Theory of Networks and Systems (MTNS)*, Leuven, Belgium, 2004.
25. S. Mastellone, P. Hokayem, C. T. Abdallah, and P. Dorato, "Nonlinear stability analysis for non-polynomial systems," *American Control Conference*, Boston, MA, June 30 - July 2 2004.
26. P. Hokayem and C. T. Abdallah, "Networked control systems: A sampled-data approach," *IEEE International Symposium on Intelligent Control*, Westin Galleria Houston TX, 2003.
27. R. Sandoval-Rodriguez, C. T. Abdallah, P. Hokayem, and E. Schamiloglu, "Robust mobile robotic formation control using Internet-like protocols," *IEEE Conference on Decision and Control*, Maui, Hawaii, 2003.

28. R. Sandoval-Rodriguez, C. T. Abdallah, and P. Hokayem, "Internet-like protocols for the control and coordination of multiple agents with time delay," *IEEE International Symposium on Intelligent Control*, Westin Galleria Houston TX, 2003.
29. S.-I. Niculescu, C. T. Abdallah, and P. Hokayem, "Effects of channel dynamics on the stability of teleoperation," *IFAC Workshop on Time-Delay Systems* INRIA, Rocquencourt, France, September 2003.
30. P. Hokayem, C. T. Abdallah, and P. Dorato, "Quasi-Monte Carlo methods in robust control design," *IEEE Conference on Decision and Control*, Maui, Hawaii, December 2003.
31. P. Hokayem, C. T. Abdallah, and P. Dorato, "Quasi-Monte Carlo methods in robust control," *Mediterranean Conference on Control and Automation*, Rhodes, 2003.
32. S.-I. Niculescu, C. T. Abdallah, and P. Hokayem, "Some remarks on the wave transformation approach for telemanipulators with time-varying distributed delay," *Asian Control Conference*, Singapore, 2002.

Theses

33. *Reliable control of multi-agent systems*, Ph.D. Thesis, University of Illinois at Urbana-Champaign, August 2007.
34. *Stability analysis of networked control systems*, M.S. Thesis, University of New Mexico, August 2003.