Theodore P. Pavlic Publication List

Additional information can be found at http://pubs.tedpavlic.com/.

SUBMITTED JOURNAL PUBLICATIONS

[1] Pavlic, T.P., and K.M. Passino. Cooperative task processing. *IEEE Transactions on Systems, Man, and Cybernetics, Part B.* 2013. In revision.

REFEREED JOURNAL PUBLICATIONS

- [2] Pavlic, T.P., and K.M. Passino. Generalizing foraging theory for analysis and design. *The International Journal of Robotics Research [Special Issue on Stochasticity in Robotics and Bio-Systems Part 1].* 30(5):505–523. 2011. doi:10.1177/0278364910396551
- [3] Pavlic, T.P., and K.M. Passino. The sunk-cost effect as an optimal rate-maximizing behavior. *Acta Biotheoretica*, 59(1):53–66. 2011. doi:10.1007/s10441-010-9107-8
- [4] Pavlic, T.P., and K.M. Passino. When rate maximization is impulsive. *Behavioral Ecology and Sociobiology*, 64(8):1255–1265. August 2010. doi:10.1007/s00265-010-0940-1
- [5] Pavlic, T.P., and K.M. Passino. Foraging theory for autonomous vehicle speed choice. *Engineering Applications of Artificial Intelligence*, 22(3):482–489, April 2009. doi:10.1016/j.engappai.2008.10.017

SUBMITTED CONFERENCE PUBLICATIONS

[6] Pavlic, T.P. Physical Stigmergy for Decentralized Constrained Optimization: An Intelligent Lighting Example. In: *Proceedings of the 4th International Conference on Cyber-Physical Systems (ICCPS 2013)*, April 8–11, 2013. Submitted.

CONFERENCE PUBLICATIONS

- [7] Kumar, G.P., A. Buffin, T.P. Pavlic, S.C. Pratt, and S.M. Berman. A Stochastic Hybrid System Model of Collective Transport in the Desert Ant Aphaenogaster cockerelli. In: Proceedings of the 16th International Conference on Hybrid Systems: Communication and Control (HSCC 2013), April 8–11, 2013.
- [8] Pavlic, T.P., and K.M. Passino. Cooperative task-processing networks. In: *Proceedings of the Second International Workshop on Networks of Cooperating Objects (CONET 2011)*, April 11, 2011.
- [9] Freuler, R.J., M.J. Hoffmann, T.P. Pavlic, J.M. Beams, J.P. Radigan, P.K. Dutta, J.T. Demel, and E.D. Justen. Experiences with a Comprehensive Freshman Hands-On Course Designing, Building, and Testing Small Autonomous Robots. In: *Proceedings of the 2003 American Society for Engineering Education Annual Conference & Exposition*, 2003.

CONFERENCE TALKS

[10] Pavlic, T.P., and S.C. Pratt. Sequential-sampling models of quorum detection in house-hunting ants. In: 2012 IUSSI-NAS Meeting, October 5–7, 2012.

CONFERENCE POSTERS

- [11] Pavlic, T.P., S. P. Peddi, P.A.G. Sivilotti, and B.W. Weide. Getting Out of the Way Safety Verification without Compromise. In: *Proceedings of the 2012 IEEE/ACM Third International Conference on Cyber-Physical Systems (ICCPS 2012)*, April 17–19, 2012. Poster abstract.
- [12] Pavlic, T.P., P.A.G. Sivilotti, A.D. Weide, and B.W. Weide. Verification of Smooth and Close Collision-Free Cruise Control. In: *Proceedings of the 2011 Symposium on Control and Modeling Cyber-Physical Systems*, October 20–21, 2011. Poster abstract.
- [13] Özgüner, Ü., A. Krishnamurthy, F. Özgüner, K. Redmill, P. Sivilotti, B. Weide, and T. Pavlic. CPS: Autonomous driving in urban environments. In: *Proceedings of the 2011 NSF CPS PI Meeting*, August 1–2, 2011. Poster abstract.
- [14] Pavlic, T.P., and K.M. Passino. Cooperative task processing. In: *Proceedings of the ICAM 2009 Symposium: Emergence in Physical, Biological, and Social Systems IV*, November 13, 2009. Poster abstract.

OTHER PUBLICATIONS

- [15] Pavlic, T.P., P.A.G. Sivilotti, A.D. Weide, and B.W. Weide. Comments on 'Adaptive Cruise Control: Hybrid, Distributed, and Now Formally Verified'. Tech. report OSU-CISRC-7/11-TR22, The Ohio State University, 2011.
- [16] Pavlic, T.P., and K.M. Passino. Cooperative Task-processing Networks: Parallel Computation of Non-trivial Volunteering Equilibria. Tech. report OSU-CISRC-3/11-TR05, The Ohio State University, 2011.
- [17] Pavlic, T.P. *Design and Analysis of Optimal Task-Processing Agents*. PhD thesis, The Ohio State University, Columbus, OH, 2010.
- [18] Pavlic, T.P. *Optimal Foraging Theory Revisited*. Master's thesis, The Ohio State University, Columbus, OH, 2007.

CHAPTERS IN PREPARATION

[19] Pavlic, T.P., and S.C. Pratt. Superorganismic Behavior via Human Computation. In: P. Michelucci (Ed.), *Handbook of Human Computation*. In preparation.

BOOKS IN PREPARATION

[20] Pavlic, T.P., B.W. Andrews, K.M. Passino, and T.A. Waite. *Foraging Theory for Engineering*. In preparation.

PAPERS IN PREPARATION

[21] Pavlic, T.P. Constrained optimization as unifying framework for the ideal free distribution and the marginal value theorem.