Nan Rong

Computer Science Department
Cornell University
344 Gates Hall, Ithaca NY 14853

Office Phone: 607-255-0285
Cell: 607-351-2298
Email: rongnan@cs.cornell.edu

Education

Ph.D. Computer Science (with minor in Economics), **Cornell University**, May 2016. Thesis: Learning in the Presence of Unawareness. Advisor: Joseph Y. Halpern.

M.S. Computer Science, **Singapore-MIT Alliance**, Singapore, Jul 2006.

B.Comp. Computer Engineering (with first-class honors), **National University of Singapore**, Singapore, Jul 2005.

Grenoble Institute of Technology, France, Fall 2003 (Student Exchange Programme).

Research Interests

Robotics, algorithms, theory, decision-making, machine learning, and game theory.

Publications

1. MDPs with unawareness in robotics*, Proceedings of the 32nd Conference on Uncertainty in AI (UAI 2016), 2016,* pp. 627-636, with J. Y. Halpern and A. Saxena.
2. Budgeted learning with unawareness, submitted to *Proceedings of Advances in Neural Information Processing Systems (NIPS 2016),* with J. Y. Halpern.
3. MDPs with unawareness, with an application, submitted to *Artificial Intelligence,* with J.Y. Halpern and A. Saxena.
4. Cooperative equilibrium: a solution predicting cooperative play, submitted to *Games and Economic Behavior,* with J. Y. Halpern.
5. Learning in the Presence of Unawareness, *PhD Thesis, 2016*
6. Towards a deeper understanding of cooperative equilibrium: characterization and complexity, *Proceedings of the 12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2013), 2013,* pp. 319-326, with J. Y. Halpern. (Best Student Paper Award Nomination)
7. MDPs with unawareness, *Proceedings of the 26th Conference on Uncertainty in AI (UAI 2010), 2010,* pp. 228-235, with J. Y. Halpern and A. Saxena.
8. Cooperative equilibrium, *Proceedings of the 9th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2010), 2010,* pp. 1465-1466, with J. Y. Halpern.
9. A point-based POMDP planner for target tracking, *Proceedings of IEEE International Conference on Robotics and Automation (ICRA 2008), 2008,* pp. 2644-2650, with D. Hsu and W.S. Lee.

10. What makes some POMDP problems easy to approximate? *Proceedings of Advances in Neural Information Processing Systems (NIPS 2007), 2007,* pp. 689-696, with D. Hsu and W. S. Lee.
11. Accelerating point-based POMDP algorithms through successive approximations of the optimal reachable space. *Technical Report TRA4/07, National University of Singapore, School of Computing, 2007*, with D. Hsu and W.S. Lee.

Awards and Honors

2013	Best Student Paper Award Nomination, Paper: "*Towards a deeper understanding of cooperative equilibrium: characterization and complexity"* at the 12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2013)
2006	Analysis and Design of Algorithm Book Prize, Singapore-MIT Alliance
2005 – 2006	Singapore-MIT Alliance Graduate Scholarship, Singapore-MIT Alliance
2005	Commencement Award (second top student of B. Comp in Computer Engineering), National University of Singapore
2002 – 2004	Dean's List, National University of Singapore

Teaching Experiences

1. Teaching assistant for Reasoning about Knowledge (CS6764), Computer Science Department, Cornell University, Spring 2015.
2. Teaching assistant for Introduction to Computing Using Java (CS1110), Computer Science Department, Cornell University, Fall 2007 and Spring 2008.
3. Teaching assistant for Database Systems with Advanced Topics (CS2102S), Computer Science Department, National University of Singapore, Singapore, Spring 2005.

Professional Activities

1. Invited presenter at the Uncertainty in Artificial Intelligence Workshops (Bayesian Applications Workshop) (UAI2016 – Workshops).
2. Reviewer for the 24th Int. Joint Conf. on Artificial Intelligence (IJCAI 2015).
3. Reviewer for the 28th AAAI Conf. on Artificial Intelligence (AAAI 2014).
4. Selected participant and presenter at Rising Stars in EECS Workshop 2013, MIT
5. Reviewer for IEEE/RSJ Int. Conf. on Intelligent Robots & Systems (IROS 2012).
6. Reviewer for the 27th Int. Conf. on Machine Learning (ICML 2010).
7. Reviewer for IEEE Transactions on Robotics (T-RO 2010).

Research and Working Experiences

1. Postdoctoral Associate, Computer Science Department, Cornell University, Summer 2016
2. Research Assistant, Computer Science Department, Cornell University, May 2008 – May 2016.

3. Software Engineering Intern, Google Inc., Mountain View, Summer 2011.
4. Research Engineer, Electrical and Computer Engineering Department, National University of Singapore, Singapore, Jul 2006 – Jul 2007.
5. Research Engineer (Internship), Sun Microsystems, Inc. (Singapore), Jan – June 2006.
6. Software Engineer, SynTec Pte. Ltd., Singapore, May - June 2005 (part time).
7. Software Engineer, Generic Power Pte. Ltd., Singapore, Aug - Oct 2004 (part time).