

Matthew Edmund Taylor

taylor@m@usc.edu

O: (213) 740-7654

H: (310) 839-9228

<http://teamcore.usc.edu/taylor/>

3351 Caroline Ave, Culver City, CA 90232

EDUCATION

- **The University of Texas**, Austin, TX. August 2003 – August 2008.
Ph.D., Department of Computer Sciences
Dissertation: Autonomous Inter-Task Transfer in Reinforcement Learning Domains
Thesis Committee: P. Stone (chair), R. Miikkulainen, R. J. Mooney, B. Porter, and R. S. Sutton
- **Amherst College**, Amherst, MA. September 1997 – May 2001.
A.B., *magna cum laude* in Computer Science and Physics with distinction

APPOINTMENTS

- **Lafayette College**, to begin Summer 2010.
Assistant Professor in the Computer Science Department.
- **The University of Southern California**, Summer 2008 – Summer 2010.
Postdoctoral Research Associate in the Department of Computer Science with Prof. Milind Tambe.
Responsibilities include supervising students, directing research projects, and writing grants.
- **The University of Texas at Austin**, Autumn 2003 – Summer 2008.
Research Assistant in the Department of Computer Sciences with Prof. Peter Stone.
- **Cycorp**, Summer 2006.
Research Intern with Dr. Michael Witbrock. Implemented machine learning techniques to solve novel problems within Cyc, a large cognitive architecture.
- **Epic Systems Corporation**, Summer 2001 – Summer 2003.
Software Developer and *Lead Software Developer* for medical applications used worldwide. Defined, developed, tested, and documented new product features.
- **Microsoft**, Summer 2000.
Software Developer Intern in the Microsoft Office group. Designed and added features to a C++ code base for client/server and server/server interactions.
- **NSF Funded Research Experience for Undergraduates**, Summer 1999.
Physics Research Intern at The University of Nebraska, Lincoln. Worked with Prof. Robert Hilborn experimentally testing the symmetrization postulate via diode laser absorption spectroscopy.

HONORS

- **Honorable Mention** for the NSF CIFellows Project (waitlisted). Spring 2009.
- **Honorable Mention** for the IFAAMAS-08 Victor Lesser Distinguished Dissertation Award (runner up). Spring 2009.
- **Nominated** by department for the ACM Doctoral Dissertation Award. Autumn 2008.
Department limited to one nominee.
- **Finalist** for Best Student Paper at AAMAS-07. Spring 2007.
- **Nominated** for UT-Austin's William S. Livingston Outstanding Graduate Student Academic Employee Award: Graduate Research Assistant. Spring 2007. Department limited to one nominee.
- **Best Paper Award**, Genetic and Evolutionary Computation Conference, GA Track. Summer 2006.
- **MCD Fellowship**, UT-Austin's Department of Computer Sciences. Autumn 2003 – Summer 2004.
- **Dean's Excellence Award**, UT-Austin's College of Natural Sciences. Autumn 2003.
- **Sigma Xi**, Awarded for research completed in a senior thesis at Amherst College. Spring 2001.
Physics Department: *Exploring Chaos with Neural Networks*.
- **NSF/STEMTEC Teaching Fellowship**. Autumn 1998.

SELECTED PUBLICATIONS

Publications are available and cross-listed by *type*, *date*, and *topic* at:

<http://teamcore.usc.edu/taylorm/>

Book

1. Matthew E. Taylor. *Transfer in Reinforcement Learning Domains*. Studies in Computational Intelligence, volume 216, Springer-Verlag, Berlin, 2009. ISBN: 978-3-642-01881-7.

Edited Volume

1. Matthew E. Taylor and Karl Tuyls, editors, *Adaptive Agents and Multi-Agent Systems IV*, Lecture Notes in Computer Science, volume 5924, Springer-Verlag, Berlin, 2010.

Ph.D. Dissertation

1. Matthew E. Taylor. *Autonomous Inter-Task Transfer in Reinforcement Learning Domains*. Department of Computer Sciences, The University of Texas at Austin, August 2008. Also available as Technical Report UT-AI-TR-08-5.

Journal Articles

5. Matthew E. Taylor, Chris Kiekintveld, Craig Western, and Milind Tambe. *A Framework for Evaluating Deployed Security Systems: Is There a Chink in your ARMOR?* **Informatica**, 2010. To Appear.

4. Matthew E. Taylor and Peter Stone. *Transfer Learning for Reinforcement Learning Domains: A Survey*. **Journal of Machine Learning Research**, 10(1): 1633–1685, 2009.

3. Shimon Whiteson, Matthew E. Taylor and Peter Stone. *Critical Factors in the Empirical Performance of Temporal Difference and Evolutionary Methods for Reinforcement Learning*. **Journal of Autonomous Agents and Multi-Agent Systems**, online July 17, 2009 with Springer DOI 10.1007/s10458-009-9100-2. Print version to appear.

2. Matthew E. Taylor, Peter Stone, and Yaxin Liu. *Transfer Learning via Inter-Task Mappings for Temporal Difference Learning*. **Journal of Machine Learning Research**, 8(1):2125–2167, 2007.

1. Shimon Whiteson, Matthew E. Taylor, and Peter Stone. *Empirical studies in action selection for reinforcement learning*. **Adaptive Behavior**, 15(1):33–50, 2007.

Book Chapters

2. Marc Ponsen, Matthew E. Taylor, Karl Tuyls. *Abstraction and Generalization in Reinforcement Learning*. In Matthew E. Taylor and Karl Tuyls, editors, *Adaptive Agents and Multi-Agent Systems IV*, Lecture Notes in Computer Science, volume 5924, pages 1–33. Springer-Verlag, 2010.

1. Peter Stone, Gregory Kuhlmann, Matthew E. Taylor, and Yaxin Liu. *Keepaway soccer: From machine learning testbed to benchmark*. In Itsuki Noda, Adam Jacoff, Ansgar Bredendfeld, and Yasutake Takahashi, editors, *RoboCup-2005: Robot Soccer World Cup IX*, volume 4020, pages 93–105. Springer-Verlag, Berlin, 2006. 28% acceptance rate at **RoboCup-2005**.

Refereed Conference Papers

18. Matthew E. Taylor, Katherine E. Coons, Behnam Robatmili, Bertrand A. Maher, Doug Burger, and Kathryn S. McKinley. *Evolving Compiler Heuristics to Manage Communication and Contention*. In Proceedings of the Twenty-Fourth Conference on Artificial Intelligence (**AAAI**), Nectar Track, July 2010. 25% acceptance rate.

17. Matthew E. Taylor, Manish Jain, Yanquin Jin, Makoto Yoko, and Milind Tambe. *When Should There be a “Me” in “Team”? Distributed Multi-Agent Optimization Under Uncertainty*. In Proceedings of the Ninth

International Joint Conference on Autonomous Agents and Multiagent Systems (**AAMAS**), May 2010. 24% acceptance rate.

16. Pradeep Varakantham, Jun-young Kwak, Matthew E. Taylor, Janusz Marecki, Paul Scerri, and Milind Tambe. *Exploiting Coordination Locales in Distributed POMDPs via Social Model Shaping*. In Proceedings of the Nineteenth International Conference on Automated Planning and Scheduling (**ICAPS**), September 2009. 34% acceptance rate.

15. Manish Jain, Matthew E. Taylor, Makoto Yooko, and Milind Tambe. *DCOPs Meet the Real World: Exploring Unknown Reward Matrices with Applications to Mobile Sensor Networks*. In Proceedings of the Twenty-First International Joint Conference on Artificial Intelligence (**IJCAI**), July 2009. 26% acceptance rate.

14. Katherine K. Coons, Behnam Robatmili, Matthew E. Taylor, Bertrand A. Maher, Kathryn McKinley, and Doug Burger. *Feature Selection and Policy Optimization for Distributed Instruction Placement Using Reinforcement Learning*. In Proceedings of the Seventh International Joint Conference on Parallel Architectures and Compilation Techniques (**PACT**), October 2008. 19% acceptance rate.

13. Matthew E. Taylor, Nicholas K. Jong, and Peter Stone. *Transferring Instances for Model-Based Reinforcement Learning*. In Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (**ECML PKDD**), September 2008. 19% acceptance rate.

12. Matthew E. Taylor, Gregory Kuhlmann, and Peter Stone. *Autonomous Transfer for Reinforcement Learning*. In Proceedings of the Seventh International Joint Conference on Autonomous Agents and Multiagent Systems (**AAMAS**), May 2008. 22% acceptance rate.

11. Matthew E. Taylor, Gregory Kuhlmann, and Peter Stone. *Transfer Learning and Intelligence: an Argument and Approach*. In Proceedings of the First Conference on Artificial General Intelligence (**AGI**), March 2008. 50% acceptance rate.

10. Matthew E. Taylor, Shimon Whiteson, and Peter Stone. *Temporal Difference and Policy Search Methods for Reinforcement Learning: An Empirical Comparison*. In Proceedings of the Twenty-Second Conference on Artificial Intelligence (**AAAI**), Nectar Track, July 2007. 38% acceptance rate.

9. Matthew E. Taylor and Peter Stone. *Cross-Domain Transfer for Reinforcement Learning*. In Proceedings of the Twenty-Fourth International Conference on Machine Learning (**ICML**), June 2007. 29% acceptance rate.

8. Matthew E. Taylor, Shimon Whiteson, and Peter Stone. *Transfer via Inter-Task Mappings in Policy Search Reinforcement Learning*. In Proceedings of the Sixth International Joint Conference on Autonomous Agents and Multiagent Systems (**AAMAS**), May 2007. 22% acceptance rate.

7. Mazda Ahmadi, Matthew E. Taylor, and Peter Stone. *IFSA: Incremental Feature-Set Augmentation for Reinforcement Learning Tasks*. In Proceedings of the Sixth International Joint Conference on Autonomous Agents and Multiagent Systems (**AAMAS**), May 2007. 22% acceptance rate.

Finalist for Best Student Paper.

6. Matthew E. Taylor and Peter Stone. *Towards Reinforcement Learning Representation Transfer*. In Proceedings of the Sixth International Joint Conference on Autonomous Agents and Multiagent Systems (**AAMAS**), poster presentation, May 2007. 22% acceptance rate, additional 25% for posters.

5. Matthew E. Taylor, Cynthia Matuszek, Pace Reagan, and Michael Witbrock. *Guiding Inference with Policy Search Reinforcement Learning*. In Proceedings of the Twentieth International FLAIRS Conference (**FLAIRS**), May 2007. 52% acceptance rate.

4. Matthew E. Taylor, Cynthia Matuszek, Bryan Klimt, and Michael Witbrock. *Autonomous Classification of Knowledge into an Ontology*. In Proceedings of the Twentieth International FLAIRS Conference (**FLAIRS**), May 2007. 52% acceptance rate.

3. Matthew E. Taylor, Shimon Whiteson, and Peter Stone. *Comparing Evolutionary and Temporal Differ-*

ence Methods for Reinforcement Learning. In Proceedings of the Genetic and Evolutionary Computation Conference (**GECCO**), July 2006. 46% acceptance rate, 85 submissions to GA track.

Best Paper Award, Genetic Algorithms Track.

2. Matthew E. Taylor, Peter Stone, and Yaxin Liu. *Value Functions for RL-Based Behavior Transfer: A Comparative Study*. In Proceedings of the Twentieth National Conference on Artificial Intelligence (**AAAI**), July 2005. 18% acceptance rate.

1. Matthew E. Taylor and Peter Stone. *Behavior Transfer for Value-Function-Based Reinforcement Learning*. In Proceedings of the Fourth International Joint Conference on Autonomous Agents and Multiagent Systems (**AAMAS**), July 2005. 25% acceptance rate.

Refereed Workshop and Refereed Symposium Papers

19. Matthew E. Taylor and Sonia Chernova. *Integrating Human Demonstration and Reinforcement Learning: Initial Results in Human-Agent Transfer*. In AAMAS 2010 workshop on Agents Learning Interactively from Human Teachers, May 2010.

18. Scott Alfeld, Matthew E. Taylor, Prateek Tandon, and Milind Tambe. *Towards a Theoretic Understanding of DCEE*. In AAMAS 2010 workshop on Distributed Constraint Reasoning, May 2010.

17. Samuel Barrett, Matthew E. Taylor, and Peter Stone. *Transfer Learning for Reinforcement Learning on a Physical Robot*. In AAMAS 2010 workshop on Adaptive and Learning Agents, May 2010.

16. Jason Tsai, Emma Bowring, Shira Epstein, Natalie Fridman, Prakhar Garg, Gal Kaminka, Andrew Ogden, Milind Tambe, and Matthew E. Taylor. *Agent-based Evacuation Modeling: Simulating the Los Angeles International Airport*. 2009 Workshop on Emergency Management: Incident, Resource, and Supply Chain Management, November 2009.

15. Matthew E. Taylor, Manish Jain, Prateek Tandon, and Milind Tambe. *Using DCOPs to Balance Exploration and Exploitation in Time-Critical Domains*. In IJCAI 2009 Workshop on Distributed Constraint Reasoning, July 2009.

14. Matthew E. Taylor, Chris Kiekintveld, Craig Western, and Milind Tambe. *Is There a Chink in Your ARMOR? Towards Robust Evaluations for Deployed Security Systems*. In IJCAI 2009 Workshop on Quantitative Risk Analysis for Security Applications, July 2009.

13. Matthew E. Taylor and Peter Stone. *Categorizing Transfer for Reinforcement Learning*. In Multidisciplinary Symposium on Reinforcement Learning, poster presentation, June 2009.

12. Shimon Whiteson, Brian Tanner, Matthew E. Taylor, and Peter Stone. *Generalized Domains for Empirical Evaluations in Reinforcement Learning*. In ICML 2009 Workshop on Evaluation Methods for Machine Learning, June 2009.

11. Matthew E. Taylor, Chris Kiekintveld, Craig Western, and Milind Tambe. *Beyond Runtimes and Optimality: Challenges and Opportunities in Evaluating Deployed Security Systems*. In AAMAS 2009 Workshop on Agent Design: Advancing from Practice to Theory, May 2009.

10. Manish Jain, Matthew E. Taylor, Makoto Yoko, and Milind Tambe. *DCOPs Meet the Real World: Exploring Unknown Reward Matrices*. In AAMAS 2009 Workshop on Agent Technology for Sensor Networks, May 2009.

9. Jun-young Kwak, Pradeep Varakantham, Matthew E. Taylor, Janusz Marecki, Paul Scerri, and Milind Tambe. *Exploiting Coordination Locales in Distributed POMDPs via Social Model Shaping*. In AAMAS 2009 Workshop on Multi-agent Sequential Decision-Making in Uncertain Domains, May 2009.

8. Matthew E. Taylor. *Assisting Transfer-Enabled Machine Learning Algorithms: Leveraging Human Knowledge for Curriculum Design*. In AAAI 2009 Spring Symposium on Agents that Learn from Human Teachers, March 2009.

7. Matthew E. Taylor, Nicholas K. Jong, and Peter Stone. *Transferring Instances for Model-Based Rein-*

forcement Learning. In AAMAS 2008 Workshop on Adaptive Learning Agents and Multi-Agent Systems, May 2008.

6. Matthew E. Taylor, Katherine E. Coons, Behnam Robatmili, Doug Burger, and Kathryn S. McKinley. *Policy Search Optimization for Spatial Path Planning*. In NIPS 2007 Workshop on Machine Learning for Systems Problems, poster presentation, December 2007.

5. Matthew E. Taylor and Peter Stone. *Representation Transfer for Reinforcement Learning*. In AAAI 2007 Fall Symposium on Computational Approaches to Representation Change during Learning and Development, November 2007.

4. Matthew E. Taylor, Gregory Kuhlmann, and Peter Stone. *Accelerating Search with Transferred Heuristics*. In ICAPS 2007 Workshop on AI Planning and Learning, poster presentation, September 2007.

3. Shimon Whiteson, Matthew E. Taylor and Peter Stone. *Adaptive Tile Coding for Reinforcement Learning*. In NIPS 2006 Workshop: Towards a New Reinforcement Learning?, poster, December 2006.

2. Matthew E. Taylor, Shimon Whiteson, and Peter Stone. *Transfer learning for Policy Search Methods*. In ICML 2006 Workshop on Structural Knowledge Transfer for Machine Learning, poster presentation, June 2006.

1. Matthew E. Taylor, and Peter Stone. *Speeding up Reinforcement Learning with Behavior Transfer*. In AAAI 2004 Fall Symposium on Real-life Reinforcement Learning, October 2004.

Unrefereed Publication

1. Shimon Whiteson, Matthew E. Taylor and Peter Stone. *Adaptive Tile Coding for Value Function Approximation*. Technical Report AI-TR-07-339, University of Texas at Austin, 2007.

GRANTS WON

- Multi Agent Autonomous Reasoning System (MAARS) for Satellite Defense. Perceptronics Solutions Inc., Milind Tambe, and Paul Scerri. DARPA, SB093-006. Submitted September 2009. \$27,500 awarded to Dr. Tambe's lab for six month contract (Phase I).
- Distributed Automated Planning System (DAPS) for a Dynamic Collection of Heterogeneous Manned and Unmanned Entities. Perceptronics Solutions Inc., Milind Tambe, and Paul Scerri. Army, A08-092. Submitted April 2009. \$170,000 awarded to Dr. Tambe's lab for two year contract (Phase II).

TEACHING

- **Assistant Instructor** at The University of Texas at Austin for *Software Systems: Unix*. Autumn 2007 (39 students) and Spring 2008 (27 students).
 - Sole instructor for class designed to quickly familiarize students with Unix/Linux.
 - Overall student evaluation: 4.4/5.0 for both semesters.
- **Tutorials**
 - *Transfer Learning and other RL Speed-up Techniques* at AAMAS. May 2010. Co-taught with Dr. Alessandro Lazaric. Part of a 1-day tutorial on RL.
 - *Transfer Learning for Reinforcement Learning Domains* at ECML. September 2009. Co-taught with Dr. Alessandro Lazaric.
 - *Transfer Learning in Reinforcement Learning* at AAMAS. May 2009. Co-taught with Dr. Alessandro Lazaric. Part of a 1.5-day tutorial on RL.
- **Guest Lectures**
 - *From DCOP to DCEE: Multi-agent Exploration* (2 classes), CS543 with Prof. Milind Tambe: Software Multiagent Systems, The University of Southern California. November 2009.
 - *Single- and Multi-agent Reinforcement Learning*, CS543 with Dr. Rajiv Maheswaran: Software Multiagent Systems, The University of Southern California. November 2009.
 - *Transfer for Reinforcement Learning*, CS599 with Prof. Fei Sha: Selected Topics in Machine Learning, The University of Southern California. April 2009.
 - *RoboCup, Robots, and Reinforcement Learning*, CS543 with Prof. Milind Tambe: Software Multiagent Systems, The University of Southern California. April 2009.
 - *Artificial Intelligence and Security*, Freshman Geography with Ms. Caitlin Ferguson. The Port of Los Angeles High School. March 2009.
 - *An Overview of Agent and Multiagent Learning*, CS499 with Prof. Milind Tambe: Intelligent Agents and Science Fiction, The University of Southern California. November 2008.
- **Teaching Assistant**
 - *The University of Texas at Austin*: Computer Fluency with Prof. Bruce Porter. Autumn 2005. Discussion leader, grader, and occasional class lecturer. Overall student evaluation: 4.3/5.0.
 - *Amherst College*: TA (and tutor) for undergraduate courses in computer science and physics. Spring 1998 – Autumn 2000.
- **Volunteer**
 - *San Juan Diego Catholic High School*, Austin TX. Spring 2007. Assisted running labs in a senior physics course and updating the school computer lab.
 - *First Bytes* program at The University of Texas at Austin. July 2004. Assisted running a computer lab in a program to attract high school women to computer science.
- **Teacher and Academic Director** at American Computer Experience Computer Camp.
 - Summers of 1996, 1997, and 1998.
 - National summer camp for students age 8–16.

INVITED TALKS and COLLOQUIA

- “Transfer Learning and Multi-Agent Exploration: Towards Real-Life Learning Agents”
 - **USC Information Sciences Institute**, Marina del Ray, CA. AI Seminar. February 2009.
- “Real-Life Learning Agents”
 - **Lafayette College**, Easton, PA. Departmental Seminar. December 2009.
- “Balancing Multi-agent Exploration and Exploitation in Time-Critical Domains”
 - **University of Texas at Austin**, Austin, TX. Forum for Artificial Intelligence. May 2009.
- “[Towards] Autonomous Inter-Task Transfer in Reinforcement Learning Domains”
 - **Lockheed Martin Advanced Technology Laboratories**, Cherry Hill, NJ. Advanced Technology Seminar. December 2008.
 - **University of Southern California**, Los Angeles, CA. Departmental Seminar. June 2008.
 - **Carnegie Mellon University**, Pittsburgh, PA. Manuela Veloso’s group meeting. April 2008.
 - **University of Wisconsin**, Madison, WI. Artificial Intelligence Seminar. October 2007.
 - **University of Washington**, Seattle, WA. Pedro Domingos’s group meeting. October 2007.
 - **Microsoft Research**, Redmond, WA. Machine Learning Reading Group. October 2007.
 - **Harvard University**, Cambridge, MA. AI Research Series. September 2007.
 - **Massachusetts Institute of Technology**, Cambridge, MA. Nick Roy’s and Leslie Pack Kaelbling’s group meeting. Sept. 2007.
 - **Brown University**, Providence, RI. Seminar. September 2007.
 - **University of Alberta**, Edmonton, CA. Artificial Intelligence Seminar Series. August 2007.
- “Faster Inference through Reinforcement Learning”
 - **Cycorp**, Austin, TX. Seminar. August 2006.
- “Speeding up Reinforcement Learning via Behavior Transfer”
 - **Amherst College**, Amherst, MA. Departmental Colloquium. September 2005.
 - **The University of Massachusetts at Amherst**, Amherst, MA. Machine Learning and Friends Lunch. September 2005.
 - **Stanford**, Stanford, CA. Pat Langley’s group meeting. June 2005.

THESIS COMMITTEE PARTICIPATION

- Jagrut Sharma, MS thesis committee (2010). University of Southern California, Computer Science Department.

STUDENTS SUPERVISED

- Shira Epstein, University of Southern California undergraduate. Autumn 2009 – present.
- Yanquin Jin, Tsinghua University undergraduate (visiting summer student). Summer 2009.
- My Luc, University of Texas at Austin undergraduate. Spring 2008.
- Andrew Ogden, University of Southern California undergraduate. Autumn 2009 – present.
- Jagrut Sharma, University of Southern California M.S. Autumn 2008 – present.
- Ankur Sheel, University of Southern California M.S. Spring 2010.
- Prateek Tandon, University of Southern California undergraduate. Autumn 2008 – present.

Co-advised with Peter Stone

- Samuel Barrett, University of Texas at Austin Ph.D. Autumn 2008 – Spring 2009.

Co-advised with Milind Tambe

- Scott Alfeld, University of Southern California Ph.D. Autumn 2009 – present.
- Manish Jain, University of Southern California Ph.D. Autumn 2008 – Summer 2009.
- Jun-young Kwak, University of Southern California Ph.D. Autumn 2008 – present.
- Rong Yang, University of Southern California Ph.D. Autumn 2009 – present.

PROFESSIONAL ACTIVITIES

- **Event coordination**
 - Co-Chair
 - * AAAI 2008 workshop — *Transfer Learning for Complex Tasks*.
 - * AAMAS 2009 workshop — *Adaptive and Learning Agents*.
 - * AAMAS 2010 workshop — *Adaptive and Learning Agents*.
 - Organizing Committee
 - * AAMAS 2010 workshop — *Agents Learning Interactively from Human Teachers*.
 - Publicity Chair
 - * ICML 2009 workshop — *The Annual Reinforcement Learning Competition*.
 - Technical Program Committee
 - * ICML 2008 workshop — *The Annual Reinforcement Learning Competition*.
- **Journal reviewer**
 - Adaptive Behavior (**AB**). 2009.
 - Advances in Complex Systems (**ACS**). 2009.
 - Artificial Intelligence Journal (**AIJ**). 2007, 2008, 2009, 2010.
 - International Journal of Agent Technologies and Systems (**IJATS**). 2008.
 - Journal of Autonomous Agents and Multi-Agent Systems (**JAAMAS**). 2008, 2009.
 - Journal of Artificial Intelligence Research (**JAIR**). 2007.
 - Journal of Machine Learning Research (**JMLR**). 2009.
 - Machine Learning Journal (**MLJ**). 2007.
- **Conference program committee / reviewer**
 - International Joint Conf. on Autonomous Agents & Multiagent System (**AAMAS**). 2009, 2010.
 - AAAI Conference on Artificial Intelligence (**AAAI**). 2010.
 - Conference of the Spanish Association for Artificial Intelligence (**CAEPIA**). 2007.
 - European Conference on Machine Learning (**ECML**). 2007.
 - International Conference on Machine Learning (**ICML**). 2008, 2009, 2010.
 - International Joint Conference on Artificial Intelligence (**IJCAI**). 2007, 2009.
 - International Semantic Web Conference (**ISWC**). 2007
 - Neural Information Processing Systems (**NIPS**). 2008, 2009.
- **Workshop program committee**
 - AAMAS 2008 workshop — *Adaptive Learning Agents and Multi-Agent Systems*.
 - ICML 2006 workshop — *Structural Knowledge Transfer for Machine Learning*.
 - IJCAI 2009 workshop — *Quantitative Risk Analysis for Security Applications*.
- **Departmental service - The University of Texas at Austin**
 - Organized the Transfer Learning Reading Group. 2007–08.
 - Graduate Student Faculty Recruiting Committee (selected by faculty for position). 2007.
 - Computer Sciences Space Committee. 2006.
 - Graduate Representative Association of Computer Sciences (elected position). 2004–05.
 - Founded and organized the Reinforcement Learning Reading Group. 2003–04.