Amy Greenwald
Curriculum Vitae

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Providence, RI 02912, USA

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Professional Experience

- *Assistant Professor*, Department of Computer Science, Brown University, 2000–Present.
- *Postdoctoral Researcher*, IBM T.J. Watson Research Center, 1998-1999.
- *Adjunct Instructor*, The Cooper Union, 1998.
- *Intern*, Xerox Palo Alto Research Center, 1997.
- *Adjunct Instructor*, New York University, 1996.

Education

- Ph.D. New York University, 1999, Computer Science.
- M.S. Cornell University, 1995, Computer Science.
- M.Sc. Oxford University, 1992, Computation.
- B.S. University of Pennsylvania, 1991, Economics *Summa Cum Laude*.
- B.Sc. University of Pennsylvania, 1991, Computer Science *Summa Cum Laude*.

Honors & Awards

NON-LOCAL

- *Alfred P. Sloan Research Fellowship*, 2006. Sloan Research Fellowships are intended to enhance the careers of the very best young faculty members in specified fields of science.
- *Presidential Early Career Award for Scientists and Engineers (PECASE)*, 2004. The PECASE program recognizes outstanding scientists and engineers who, early in their careers, show exceptional potential for leadership at the frontiers of knowledge. **This Presidential Award is the highest honor bestowed by the United States Government on scientists and engineers beginning their independent careers.**
- *NSF Career Award*, 2002. This National Science Foundation program supports the early the development of academic careers. Its winners promise to enhance the excitement of research with inspired teaching and enthusiastic learning.
- *CRA Digital Government Fellow*, 2001–2002. This program is supported by the National Science Foundation and administered by the Computing Research Association (CRA). It aims to build ties between academic and industrial computing research communities.

LOCAL

- *Curricular Development Grant*, Summer 2007. Awarded to fund the re-development of CSCI 0170, "Computer Science: An Integrated Introduction."
- *Wayland Collegium Faculty Interdisciplinary Seminar Grant*, 2004–2005, with Steven Sloman, Roberto Serrano, and Pedro Dal Bó. Funds awarded for an interdisciplinary lecture series on *Decision Making and Rationality*, in which we hosted (among others) two Nobel laureates at Brown.
- *Richard B. Salomon Research Award*, 2003. Seed money awarded by Brown University to initiate interdisciplinary research with Pedro Dal Bó and Indrajit Ray, two professors in economics.
- *PKAL Faculty for the 21st Century Leader*, 2002. Nominated by Brown's Dean of the College to serve as the University's representative to Project Kaleidescope, a national alliance that promotes innovation in mathematics, engineering, and science education.
- *IBM Research Best Paper Award*, 2000. "Shopbots and Pricebots," with Jeff Kephart.

GRADUATE

- *Janet Fabri Memorial Prize*, 1999: awarded annually for an outstanding dissertation in computer science.
- *American Association of University Women Dissertation Fellowship*, 1997–1998.
- *Sandra Bleistein Prize*, 1997: awarded annually to a woman with notable achievements in computer science or applied mathematics.
- *Office of Naval Research Graduate Student Fellowship*, 1993–1996.
- *Thouron Scholar*, 1991–1992: full tuition scholarship and stipend to Oxford University.

UNDERGRADUATE

- *Hugo Otto Wolf Memorial Prize*, 1991: awarded to the member of the senior class whose work meets with the greatest approval of the professors in charge.
- *Rose Foundation Undergraduate Research Award*, 1991: recognizes outstanding achievement in research by an undergraduate.
- *Beverly Virany Memorial Prize*, 1991: recognizes excellence in scholarship and leadership potential for a Wharton woman.
- *Cornelius N. Weygandt Award Distinguished Senior Award*, 1991: awarded annually to a student whose nature as a human being assures him or her a full and successful life, and whose performance as an undergraduate student has earned the respect and admiration of his or her peers.
- *Honorable Mention for James Howard Weiss Memorial Award*, 1991: recognizes distinguished academic achievement and undergraduate leadership.
- *E. Stuart Eichert, Jr. Memorial Prize*, 1990: Awarded to juniors that best demonstrate initiative, intellectual ability, and commitment to the professional practice of engineering. Computer science nominee.
- *Benjamin Franklin Honors Program*, *University Scholar*, 1987–1991.

External Funding

- National Science Foundation, 9/1/2006–8/31/2007.
  Workshop for Women in Machine Learning, $21,551.
- National Science Foundation, 4/1/2006–3/31/2007.
  The Trading Agent Competition, $27,500.
- Alfred P. Sloan Research Fellowship, 2006–2007.
  Interacting AI Agents: Theory and Practice, $45,000.
- National Science Foundation, 12/1/2005–11/30/2008.
  Efficient Link Analysis: A Hierarchical Voting System, $363,000.
- National Science Foundation CAREER Grant, 3/1/2002–2/28/2007.
  Computational Social Choice Theory. $375,000.
- National Science Foundation, 10/1/1998–9/30/2001,
  with Bud Mishra (NYU) and Rohit Parikh (CUNY).
  Automated Learning in Network Traffic Control. $315,000.
- IBM University Partners Program, 2001–2002.
  Strategic Bidding Agents for Online Auctions. $30,000.

The above list does not include summer supplements to support undergraduate research via the National Science Foundation's Research Experience for Undergraduates program, nor the Computing Research Association for Women's Distributed Mentor program, nor Brown's (internal) Undergraduate Teaching and Research program.

Patents

- A. Greenwald and J. Wicks. System and Method of Computing an Importance Ranking for a Collection of Objects in a Hyperlinked Database, application filed July 2007.
- A. Greenwald and J. Wicks. Importance Ranking for a Hierarchical Collection of Objects, application filed May 2006.

Publications

BOOKS

[2007] Wellman, M., A. Greenwald and P. Stone. *Autonomous Bidding Agents: Strategies and Lessons from the Trading Agent Competition*. Intelligent Robotics and Autonomous Agents. MIT Press, Cambridge, 2007.

BOOK CHAPTERS

[2006] Greenwald, A., B. Guillemette, V. Naroditskiy and M. Tschantz. Scaling up the sample average approximation method for stochastic optimization with applications to trading agents. In *Edited volume of the AMEC and TADA 2005 Workshops*, volume 3937 of Lecture Notes in Artificial Intelligence. Springer Verlag, 2006.

[2002] Kephart, J. and A. Greenwald. Shopbot economics. In *Game-theoretic and Decision-theoretic Agents*. Kluwer Academic Publishers, 2002.

[2000] Greenwald, A. and J. Kephart. Shopbots and pricebots. In *Agent-mediated Electronic Commerce II*, volume 1788 of Lecture Notes on Artificial Intelligence. Springer-Verlag, 2000.

JOURNAL ARTICLES

[2008] Greenwald, A., K. Kannan and R. Krishnan. On evaluating information revelation policies in e-marketplaces: A Markov decision process approach. *Information Systems Research*, ?(?):To Appear, 2008.

[2007] Arora, A., A. Greenwald, K. Kannan and R. Krishnan. Effect of information revelation policies under market structure uncertainty. *Management Science*, 54(8):1234–1248, 2007.

[2007] Zinkevich, M., A. Greenwald and M. Littman. A hierarchy of prescriptive goals for multiagent learning. *Artificial Intelligence*, 17(7):440–447, 2007.

[2005] Stone, P. and A. Greenwald. The first international Trading Agent Competition: Autonomous bidding agents. *Electronic Commerce Research: Special Issue on Dynamic Pricing*, 5:229–265, 2005.

[2005] Greenwald, A. and J. Boyan. Bidding algorithms for simultaneous auctions: A case study. *Autonomous Agents and Multiagent Systems*, 10(1):67–89, 2005.

[2003] Morris, J., P. Maes and A. Greenwald. Learning curve: A simulation-based approach to dynamic pricing. *Electronic Commerce Research*, 3(3–4):245–276, 2003.

[2003] Wellman, M., A. Greenwald, P. Stone and P. Wurman. The 2001 Trading Agent Competition. *Electronic Markets*, 13(1):4–12, 2003.

[2002] Kephart, J. and A. Greenwald. Shopbot economics. *Autonomous Agents and Multiagent Systems: Special Issue on Game-Theoretic and Decision-Theoretic Agents*, 5(3):255–287, 2002.

[2001] Greenwald, A., E. Friedman and S. Shenker. Learning in network contexts: Results from experimental simulations. *Games and Economic Behavior: Special Issue on Economics and Artificial Intelligence*, 35(1/2):80–123, 2001.

[2000] Kephart, J., J. Hanson and A. Greenwald. Dynamic pricing by software agents. *Computer Networks Journal: Special Issue on Trends and Research in E-Commerce*, 32(6):731–752, 2000.

CONFERENCE PAPERS

[2007] Wicks, J. R. and A. Greenwald. More efficient parallel computation of PageRank. In *SIGIR '07: Proceedings of the 29th Annual International ACM Conference on Research and Development in Information Retrieval*, pages 861–2, July 2007. Poster.

[2007] Naroditskiy, V. and A. Greenwald. Using iterated best-response to find Bayes-Nash equilibria in auctions. In *AAAI '07: Proceedings of the 22nd National Conference on Artificial Intelligence*, pages 1894–1895, July 2007. Student Poster.

[2007] Lee., S. J., A. Greenwald and V. Naroditskiy. RoxyBot-06: An SAA^2 TAC Travel agent. In *IJCAI '07: Proceedings of the 20th International Joint Conference on Artificial Intelligence*, pages 1378–1383, January 2007. *Plenary Talk*.

[2006] Greenwald, A., Z. Li and C. Marks. Bounds for regret-matching algorithms. In *AIMath '06: Proceedings of the 9th International Symposium on Artificial Intelligence and Mathematics*, January 2006.

[2006] Wicks, J. R. and A. Greenwald. A quotient construction on markov chains with applications to the theory of generalized simulated annealing. In *AIMath '06: Proceedings of the 9th International Symposium on Artificial Intelligence and Mathematics*, January 2006.

[2006] Zinkevich, M., A. Greenwald and M. Littman. Cyclic equilibria in Markov games. In *NIPS '05: Advances in Neural Information Processing Systems*, volume 19. MIT Press, 2006. *Plenary Talk*.

[2005] Wicks, J. R. and A. Greenwald. An algorithm for computing stochastically stable distributions with applications to multiagent learning in repeated games. In *UAI '05: Proceedings of the 21st Conference on Uncertainty in Artificial Intelligence*, pages 623–632, July 2005.

[2004] Greenwald, A. and J. Boyan. Bidding under uncertainty: Theory and experiments. In *UAI '04: Proceedings of the 20th Conference on Uncertainty in Artificial Intelligence*, pages 209–216, July 2004.

[2004] Benisch, M., A. Greenwald, I. Grypari, R. Lederman, V. Naroditskiy and M. Tschantz. Botticelli: A supply chain management agent. In *AAMAS '04: 3rd International Conference on Autonomous Agents and Multiagent Systems*, volume 3, pages 1174–1181, July 2004.

[2004] Benisch, M., A. Greenwald, V. Naroditskiy and M. Tschantz. A stochastic programming approach to TAC SCM. In *EC '04: 5th ACM Conference on Electronic Commerce*, pages 152–160, May 2004.

[2003] Greenwald, A., K. Kannan and R. Krishnan. A computational approach to compare information revelation policies. In *ICIS '03: Proceedings of the International Conference on Information Systems*, pages 706–719, December 2003.

[2003] Greenwald, A. and A. Jafari. A class of no-regret algorithms and game-theoretic equilibria. In *COLT '03: Proceedings of the 16th Conference on Computational Learning Theory*, pages 1–11, August 2003.

[2003] Greenwald, A. and K. Hall. Correlated Q-learning. In *ICML '03: Proceedings of the 20th International Conference on Machine Learning*, pages 242–249, 2003.

[2003] Greenwald, A. Bidding marginal utility in simultaneous auctions. In *ICJAI '03: Proceedings of the 18th International Joint Conference on Artificial Intelligence*, pages 1463–1464, August 2003. Poster.

[2002] Farago, J., A. Greenwald and K. Hall. Fair and efficient solutions to the santa fe bar problem. In *GHC '02: Proceedings of the Grace Hopper Celebration of Women in Computing*, October 2002.

[2002] Wellman, M., A. Greenwald, P. Stone and P. Wurman. The 2001 Trading Agent Competition. In *Proceedings of the Fourteenth Innovative Applications of Artificial Intelligence Conference*, pages 935–941, July 2002.

[2001] Greenwald, A. and J. Boyan. Bidding algorithms for simultaneous auctions: A case study. In *EC '01: Proceedings of 3rd ACM Conference on Electronic Commerce*, pages 115–124, October 2001.

[2001] Boyan, J. and A. Greenwald. Bid determination in simultaneous auctions: An agent architecture. In *EC '01: Proceedings of 3rd ACM Conference on Electronic Commerce*, 210–212 2001. Short Paper.

[2001] Morris, J., P. Maes and A. Greenwald. Learning curve: Analysis of an agent pricing strategy under varying conditions. In *ICAI '01: Proceedings of the International Conference on Artificial Intelligence*, pages 1135–1141, June 2001.

[2001] Morris, J., A. Greenwald and P. Maes. Dynamic pricing strategies under a finite time horizon. In *EC '01: Proceedings of 3rd ACM Conference on Electronic Commerce*, pages 95–104, October 2001.

[2001] Jafari, A., A. Greenwald, G. Ercal and D. Gondek. On no-regret learning, Nash equilibrium, and fictitious play. In *ICML '01: Proceedings of 18th International Conference on Machine Learning*, pages 226–233, June 2001.

[2001] Greenwald, A. and J. Kephart. Probabilistic pricebots. In *AA '01: Proceedings of the 5th International Conference on Autonomous Agents*, pages 560–567, May 2001.

[1999] Greenwald, A., J. Kephart and G. Tesauro. Strategic pricebot dynamics. In *EC '99: Proceedings of the 1st ACM Conference on Electronic Commerce*, pages 58–67, November 1999.

[1999] Greenwald, A. and J. Kephart. Shopbots and pricebots. In *IJCAI '99: Proceedings of the 16th International Joint Conference on Artificial Intelligence*, volume 1, pages 506–511, August 1999.

[1999] Kephart, J. and A. Greenwald. Shopbot economics. In *ECSQARU-07: Proceedings of the 5th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty*, pages 208–220, July 1999.

[1999] Kephart, J. and A. Greenwald. Shopbot economics. In *AA '99: Proceedings of the 3rd International Conference on Autonomous Agents*, pages 378–379, May 1999. Poster.

WORKSHOP PAPERS

[2007] Wicks, J. and A. Greenwald. Parallelizing the computation of PageRank. In *WAW '07: The 5th Workshop on Algorithms and Models for the Web-Graph*, pages 202–8, December 2007. Short Paper.

[2007] Chen, S., A. Greenwald and A. Bascetincelik. Learning to predict prices in a supply chain management game. In *WIML '07: 2nd Workshop for Women in Machine Learning*, October 2007. Poster.

[2007] Odean, T., V. Naroditskiy, A. Greenwald and J. Donaldson. Marginal bidding: An application of the equimarginal principle to bidding in TAC SCM. In *TADA '07: Workshop on Trading Agent Design and Analysis*, pages 27–35, July 2007.

[2006] Greenwald, A. and J. Wicks. Quickrank: A recursive ranking algorithm. In *1st International Workshop on Computational Social Choice Theory*, pages 220–233, December 2006.

[2006] Lee., S. J., A. Greenwald and V. Naroditskiy. RoxyBot-06: An SAA^2 TAC Travel agent. In *TADA '06: Workshop on Trading Agent Design and Analysis*, May 2006. *Best Poster*.

[2005] Greenwald, A., B. Guillemette, V. Naroditskiy and M. Tschantz. Scaling up the sample average approximation method for stochastic optimization with applications to trading agents. In *TADA '05: Workshop on Trading Agent Design and Analysis*, pages 14–20, July 2005.

[2004] Bell, S., M. Benisch, M. Benthall, A. Greenwald and M. Tschantz. Multiperiod online optimization in TAC SCM: The supplier offer acceptance problem. In *TADA '04: Workshop on Trading Agent Design and Analysis*, pages 21–27, July 2004.

[2003] Greenwald, A. Bidding under uncertainty. In *TADA '03: Workshop on Trading Agent Design and Analysis*, pages 14–19, August 2003.

[2002] Hall, K. and A. Greenwald. Correlated Q-learning. In *AAAI Spring Symposium Technical Report SS-02-02*, pages 84–89, March 2002.

[2001] Boyan, J., A. Greenwald, R. Kirby and J. Reiter. Bidding algorithms for simultaneous auctions. In *Workshop on Economic Agents, Models, and Mechanisms*, pages 1–11, 2001.

[2001] Greenwald, A. and J. Kephart. Probabilistic pricebots. In *AAAI Spring Symposium Technical Report SS-01-03*, pages 37–44, March 2001.

MAGAZINE ARTICLES

[2008] Greenwald, A. and R. Greenwald. Do you participate in Vickrey auctions? *The American Philatelist*, To Appear 2008.

[2007] Greenwald, A. Autonomous bidding agents: Strategies and lessons from the Trading Agent Competition. *Conduit*, 16(1):8–11, 2007.

[2006] Greenwald, A. Autonomous bidding agents: Strategies and lessons from the Trading Agent Competition. *Brown University Faculty Bulletin*, VII(1):7–8, 2006.

[2006] Greenwald, A. Game theory and the design of electronic markets. *ACM Computing Reviews*, 2006.

[2006] Greenwald, A. and V. Naroditskiy. Heuristics for the deterministic bidding problem. *SIGecom Exchanges*, 6(1):35–44, 2006.

[2005] Greenwald, A. The Science Diversity Workshop. *Conduit*, 14(2):25–26, 2005.

[2004] Benisch, M., A. Greenwald, I. Grypari, R. Lederman, V. Naroditskiy and M. Tschantz. Botticelli: A supply chain management agent designed to optimize under uncertainty. *SIGecom Exchanges*, 4(3):29–37, 2004.

[2003] Greenwald, A. The 2002 Trading Agent Competition: An overview of agent designs. *AI Magazine*, April 2003.

[2002] Greenwald, A. The International Trading Agent Competition: Focus on RoxyBot. *Computing Research News*, page 3, November 2002.

[2001] Greenwald, A. and P. Stone. Autonomous bidding agents in the Trading Agent Competition. *IEEE Internet Computing: Special Issue on Virtual Markets*, April 2001.

[2000] Greenwald, A. Internet agent economics: A Trading Agent Competition. *Conduit*, 9(2):1–4, 2000.

[2000] Kephart, J. and A. Greenwald. When bots collide. *Harvard Business Review*, pages 17–18, July–August 2000.

TECHNICAL REPORTS

[2006] Greenwald, A., V. Naroditskiy and S. J. Lee. Heuristics for the deterministic bidding problem: Lessons from tac travel. Technical Report CS-06-15, Brown University, Department of Computer Science, June 2006.

[2006] Greenwald, A., Z. Li and C. Marks. Bounds for regret-matching algorithms. Technical Report CS-06-10, Brown University, Department of Computer Science, June 2006.

[2006] Greenwald, A., A. Jafari and C. Marks. Blackwell's approachability theorem: A generalization in a special case. Technical Report CS-06-01, Brown University, Department of Computer Science, January 2006.

[2005] Greenwald, A. Bid determination in simultaneous auctions. Technical Report CS-05-16, Brown University, Department of Computer Science, November 2005.

[2005] Greenwald, A. and M. Zinkevich. A direct proof of the existence of correlated equilibrium policies in general-sum markov games. Technical Report CS-05-07, Brown University, Department of Computer Science, June 2005.

[2005] Greenwald, A., K. Hall and M. Zinkevich. Correlated Q-learning. Technical Report CS-05-08, Brown University, Department of Computer Science, June 2005.

EDITORSHIPS

[2007] Greenwald, A. and M. Littman. Introduction to the special issue on learning and computational game theory. *Machine Learning: Special Issue on Learning and Computational Game Theory*, May 2007.

[2005] Zurko, M. and A. Greenwald. Foreward. *Electronic Commerce Research: Special Issue on World Wide Web Electronic Commerce, Security, and Privacy*, January 2005.

[2003] Greenwald, A., N. R. Jennings and P. Stone. Guest editor's introduction: Agents and markets. *IEEE Intelligent Systems: Special Issue on Agents and Markets*, November 2003.

Lectures

DISTINGUISHED LECTURES

Autonomous Bidding Agents: Lessons from the Trading Agent Competition
Tufts University Computer Science Department Distinguished Lecture Series (November 2006)

Autonomous Bidding in the Trading Agent Competition
Federal Communications Commission, Wireless Telecommunications Bureau (May 2002)

INVITED CONFERENCE TALKS

Game-Theoretic Learning
A Conference to Commemorate the 70th Birthday of Professor Rohit Parikh (December 2006)

Multiagent Learning in Games
Twentieth National Conference on Artificial Intelligence (July 2005)

A General Class of No-Regret Learning Algorithms and Game-Theoretic Equilibria
The Sixteenth Annual Conference on Learning Theory (August 2003)

INVITED WORKSHOP TALKS

Game-Theoretic Learning
Women in Machine Learning: Theory, Applications, and Experiences (October 2006)

INVITED COLLOQUIUM TALKS

Autonomous Bidding Agents: Lessons from the Trading Agent Competition
Cornell University, Department of Computer Science Colloquium (February 2007)
Harvard University, Department of Computer Science Colloquium (April 2006)

Bidding Algorithms for Simultaneous Auctions
University of Maryland Baltimore County, Department of Computer Science Colloquium (October 2001)

INVITED SEMINAR SERIES TALKS

A General Class of No-Regret Learning Algorithms and Game-Theoretic Equilibria
Brown University, Department of Computer Science Annual Retreat (May 2007)

QuickRank: A Recursive Ranking Algorithm
Cornell University Artificial Intelligence Seminar, Department of Computer Science (February 2007)

Bidding Heuristics for Simultaneous and Sequential Auctions
Massachusetts Institute of Technology, Language, Learning, Vision & Graphics Seminar (April 2006)
New York University, Information Systems Research Seminar (December 2005)

Game-Theoretic Learning: Regret Minimization vs. Utility Maximization
Brown University, Wayland Collegium Faculty Interdisciplinary Seminar on Decision Making and Rationality (October 2004)

Bidding under Uncertainty: Lessons from TAC Classic
University of Michigan STIET Seminar (September 2004)

Results on No-Regret Learning and Game-Theoretic Equilibria: Existence and Convergence
California Institute of Technology, Social and Information Sciences Laboratory Seminar Series (October 2003)

Reinforcement Learning in Stochastic Games
City University of New York, Seminar on Logic and Games (February 2003)

Correlated and No-Regret Q-Learning
Brown University, Economic Theory Seminar (March 2002)

RoxyBot: A Dynamic Bidding Agent for Simultaneous Auctions
Brown University, Economic Theory Seminar (November 2000)

Bidding Strategies in The Trading Agent Competition
North Carolina State University, E-Commerce Seminar Series (November 2000)

INVITED SEMINAR TALKS

QuickRank: A Recursive Ranking Algorithm
Yahoo! Research, Microeconomics and Social Systems Seminar (December 2006)

Autonomous Bidding Agents: Lessons from the Trading Agent Competition
University of California at San Diego, Department of Computer Science (October 2006)

Bidding Heuristics for Simultaneous and Sequential Auctions
Rutgers University, Laboratory for Real-Life Reinforcement Learning Seminar (April 2006)

Game-Theoretic Learning
University of California at Berkeley, Center for Intelligent Systems (April 2005)
University of Pennsylvania, Machine Learning Seminar (November 2004)

Results on No-Regret Learning and Game-Theoretic Equilibria: Existence and Convergence
Stanford University, Multiagent Research Group Seminar (October 2003)

Learning to Play Network Games
IBM T.J. Watson Research Center, Brown University, Columbia University, University of Michigan, New York University, Santa Fe Institute, MIT (March through May 1999)

Shopbot Economics
Northwestern University, Industrial Engineering & Management Science Seminar (February 1999)

Shopbots and Pricebots
City University of New York, Computer Science Seminar (November 1998)

The 1997 Summer Games
Xerox Palo Alto Research Center (August 1997)

ACCEPTED WORKSHOP TALKS

No-Regret Learning in Convex Games (presented by Casey Marks)
DIMACS Workshop on the Boundary between Economic Theory and Computer Science (October 2007)

Multiagent Value Iteration in Markov Games
Stony Brook Game Theory Festival, Workshop on Game Theory and Computer Science (July 2005)

Learning Correlated Equilibrium Policies in Markov Games
Multiagent Learning Workshop at Neural Information Processing Systems (December 2002)

Correlated Q-Learning
DIMACS Workshop on Computational Issues in Game Theory and Mechanism Design (November 2001)

On No-Regret Learning and Nash Equilibrium
First Meeting of the Game Theory Society (July 2000)
Uncertainty in Artificial Intelligence Workshop: Beyond Markov Decision Processes (June 2000)

Santa Fe Bar Problem Revisited
Stony Brook Game Theory Festival, Workshop on Interactive Dynamics and Learning (July 1998)

Learning in Network Contexts: Simulation Experiments
DARPA Graduate Student Workshop (July 1998)

Automated Learning in Network Games
Eighth Meeting of the International Society of Dynamic Games (July 1998)

Automated Learning in Network Traffic Control
Fourth INFORMS Telecommunications Conference (March 1998)

ACCEPTED TUTORIALS

Trading Agent Design and Analysis
Fifth Americas School on Agents and Multiagent Systems (July 2006)
ACM Conference on Electronic Commerce (June 2006)

Game-Theoretic Learning
International Conference on Machine Learning (July 2004)

INVITED PANELIST

Strategic Challenges in Market Games
Trading Agent Competition Workshop (October 2001)

GUEST LECTURES

Introduction to Artificial Intelligence
Professor Meinolf Sellmann (March 2006)

Innovating Game Development
Professor O. Chad Jenkins (February 2006)

Computational Cognitive Science
Professor Tom Griffiths (October 2005)

Programming

Trading Agent Competition Supply Chain Management: Finalist, 2003–04, 2006.
2007 Students: Cutler, Hart, Odean, Naroditsky, Ramirez, Zimmerman. Semi-Finalist.
2006 Students: John Donaldson, Victor Naroditskiy, A. & Y. Sabzposh, Jonathan Rhone
2005 Students: Isaac Haxton, Victor Naroditskiy, Andrew Simon. Semi-Finalist
2004 Students: Lucia Ballard, Bryan Guillemette, Victor Naroditskiy, Haru Sakai
2003 Students: Benisch, Grypari, Lederman, Naroditskiy, Tschantz

Trading Agent Competition Travel: Winner, 2006. Finalist, 2002–05. Co-winner, 2000.
2006 Students: Seong-Jae Lee and Victor Naroditskiy
2005 Students: Bryan Guillemette and Seong-Jae Lee
2004 Student: Jonathan Bankard
2002 Students: Maureen Hurtgen and Nicole Dombeck

2000 Collaborator: Justin Boyan

Code Release: *RoxyBot*, an implementation of a TAC Travel agent. June 2005.
Code Release: *RoxyBot*, version 2, including a TAC Travel simulator. May 2007.

Trading Agent Competition Market-Based Control
2007 Students: Joshua Fuhrmann

Trading Agent Competition Prediction Challenge
2007 Students: Aysun Bascetincelik and Dawn Chen

International Conference on Machine Learning Physiological Data Mining Contest
2004 Students: D. Grollman, A. Johnsson, M. Lease, B. Ng, J. Turner, T. Sweetser

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Service to the Profession

SENIOR PROGRAM COMMITTEES

AAAI	National Conference on Artificial Intelligence	2006,2007,2008
ICML	International Conference on Machine Learning	2006,2008
AAMAS	Autonomous Agents and Multiagent Systems	2006

PROGRAM COMMITTEES

AIMath	Ninth Symposium on Artificial Intelligence and Mathematics	2006
ALAMAS	Adaptation and Learning in Autonomous Agents and Multiagent Systems	2006,2008
IJCAI	International Joint Conference on Artificial Intelligence	2005
SAC	Symposium on Applied Computing, Ecommerce Technologies Track	2004–Present
GTDT	Game-theoretic and Decision-theoretic Agents Workshop	2000–Present
AMEC	Agent-Mediated Electronic Commerce Workshop	2002–Present
TADA	Trading Agent Design and Analysis Workshop	2003–Present
EC	ACM Conference on Electronic Commerce	2001 & 2005
AAAI	National Conference on Artificial Intelligence	2002
UAI	Uncertainty in Artificial Intelligence Conference	2002
	Grace Hopper Celebration of Women in Computing	2002
	AAAI Collaborative Learning Agents Spring Symposium	2002
	Autonomous Agents Conference, Learning Agents Workshop	2001

EDITORIAL ROLES

Editor-in-Chief	ACM SIG E-commerce Exchanges	2004–2006
Board Member	Journal of Artificial Intelligence Research	2003–2006
Board Member	Journal of Electronic Commerce Research	2005–Present

ORGANIZATIONAL ROLES

Secretary/Treasurer	ACM Special Interest Group on Ecommerce	2007–Present
Steering Committee	Pacific Rim Int'l Workshop on Multi Agents	2007
Faculty Advisor	Workshop for Women in Machine Learning	2006
General Chair	Trading Agent Competition	2006
Board Member	Trading Agent Competition Board of Trustees	2003–Present
Committee Member	Trading Agent Competition Workshop @ AAAI	2002

Deputy Chair	Electronic Commerce Area, WWW Conference	2002
Chair	Trading Agent Competition Workshop @ ACM EC	2001
Co-Chair	IJCAI Workshop on Agents, Models, and Mechanisms	2001
Co-Chair	Conference on Probabilities, Conditionals, and Games	2000
Co-Chair	ICML Workshop on Multiagent Learning	2000

PAPER REVIEWING

MLJ	Machine Learning Journal	2006
	Computers and Operations Research Journal	2006
ECAI	European Conference on Artificial Intelligence	2004
JMLR	Journal of Machine Learning Research	2004
JAIR	Journal of Artificial Intelligence Research	2002,2007
GEB	Journal of Games and Economic Behavior	01,03,05,07
IJCAI	International Joint Conference on AI	2001
WWW	WWW Conference, Electronic Commerce Area	2000
	Journal of Computing in Higher Education	2000
ECR	Electronic Commerce Research Journal	2000
AIJ	Artificial Intelligence Journal	2000
Science	Science Magazine	2000

PANEL PARTICIPATION

VENI	Innovational Research Incentives Scheme (Netherlands)	2004
ISAT	Distributed Cognitive Systems Study Group and Multiagent Learning	2004
NSF	Small ITR Program	2003
DARPA	Cognitive Networks Workshop	2002
NSF	Digital Societies and Technologies Program	2002
NSF	Societal Dimensions of Engineering, Science, and Technology	2002
NSF	Computational Social Systems Program	2001

MEMBERSHIPS

AAAI	American Association of Artificial Intelligence	2001–Present
SIGecom	ACM Special Interest Group on Electronic Commerce	2000–Present
ACM	Association of Computing Machinery	1999–Present
AAUW	American Association of University Women	1998–Present
AEA	American Economic Association	2002–2003

THESIS EXAMINATION

Brown University, Applied Math	2003
McGill University, Computer Science	2002

Other Service

Service to the University

Science Diversity Workshop	2004–2005
First Year Advisor	2004–2005,2007–2008

Service to the Department

Organizer, Artificial Intelligence Lunch/Lecture Series	2004–2005
Faculty Sponsor, Computer Science WiSE Affinity Group	2002–Present
Faculty Advisor, Women in Computer Science (WiCS)	2002–Present
Member, CS Undergraduate Committee	2003–2005
Member, CS Curriculum Committee	2002–2005
Member, CS Graduate Student Committee	2003–2004
Member, CS Graduate Admissions Committee	2000–03,2007–08
Chair (2002), CS Graduate Recruiting Committee	2000–2002
Co-Chair, Industrial Partners Program Symposium	Spring 2000

Teaching

CSCI 0170	Computer Science: An Integrated Introduction	2007–Present
CSCI 0244	Game Theory in Artificial Intelligence	2007–Present
CSCI 0141	Introduction to Artificial Intelligence	2000–2005
CS 295-5	Internet Agent Economics	2000–2003
MA 110	Introduction to Linear Algebra *at the Cooper Union*	1998
CS 380	Fundamentals of Computer Science Using C *at the Stern School of Business*	1996

Advising

PostDocs

- Martin Zinkevich, Multiagent Learning in Games, 2004–2005; now at Yahoo! Research

Current PhD

- John Wicks, Efficient Link Analysis, Expected 2008
- Casey Marks, No-Regret Learning in Games, Expected 2008
- Victor Naroditskiy, Economics and Computer Science, Expected 2009
- Eric Sodomka, Trading Agent Design and Analysis, Entered 2007

Past PhD

- Karthik Kannan, E-Marketplaces, 2003 (Co-advised), CMU
- Keith Hall, Natural Language Processing, 2004 (Co-advised)
- David Gondek, Machine Learning, 2004 (Co-advised)

Current MSc

- Tyler Odean, Trading Agent Design and Analysis, Entered 2007

Past MSc

- Zach Shubert, Transportation Assistant, 2007
  went on to `amiestreet.com`
- John Donaldson, Trading Agent Design, 2006
  went on to Morgan Stanley
- Jesse Funaro, Transportation Assistant, 2005
  went on to ITA Software
- Zheng Li, No-Regret Learning in Games, 2005
  completed his PhD in Applied Math in 2007
- Benjamin Mishkin, Financial Markets, 2004
- Amir Jafari, No-Regret Learning in Games, 2003
  completed his PhD in Math in 2003
- Chris Leroy, Transportation Assistant, 2003
- Joan Morris, Dynamic Pricing, 2001 (Co-advised), MIT
  completed her PhD at MIT's Media Lab in 2005

Distributed Mentor Program

- Dawn Chen, Berkeley (2007); applying to PhD programs in Cognitive Science
- Maureen Hurtgen, Duke (2002); went on to the Peace Corps in West Africa
- Nicole Dombeck, Bucknell (2002); current pursuits unknown to me
- Julia Farago, Harvard (2001); applying to PhD programs in Computer Science
- Victoria Manfredi (2001), Smith; presently pursuing her PhD at UMASS Amherst
- Rebecca Hutchinson (2000), Bucknell; completed her PhD in machine learning at CMU
- Gunes Ercal (2000), USC; presently pursuing her PhD in CS theory at UCLA

Undergraduate Honors Theses

- Seong Jae Lee (2007), Comparison of Bidding Algorithms for Simultaneous Auctions
  presently pursuing his PhD in Computer Science at UW
- Daniel Bookstaber (2005), Using Markov Decision Processes to Solve a Portfolio Allocation Problem
  went on to work at a hedge fund, Frontpoint Partners, building quantitative equity models
- Michael Benisch (2004), Optimization under Uncertainty in Online Trading Agents (UTRA) presently pursuing his PhD in Computation, Organizations, and Society at CMU
- Roger Lederman (2003), Optimization of Stochastic Inventory Control with Correlated Demands
  presently pursuing his PhD in Operations Research at Columbia
- Nicolas Schaden (2002), Autonomous Bidding Agents, Portfolio Risk, and Diversification
  recently left the life of an investment banker; NYC photographs @ `ashotapart.com`

Undergraduate Independent Studies

- Jason French, Fantasy Hip Hop, Fall 2007
- J. Clark Cutler, Trading Agent Design, 2007 (UTRA)
- Joshua Fuhrmann, Trading Agent Design, 2007 (UTRA)
- Joe Zimmerman (Harvard), Trading Agent Design, Summer 2007 (REU)
- Christopher Hart, Trading Agent Design, 2006–2007

- Seong Jae Lee, Trading Agent Design, 2005–2007
- Mauricio Ramirez (Bogotá), Trading Agent Design, Summer of 2005 and 2006
- Jonathan Rhone, Trading Agent Design, Spring 2006
- Isaac Haxton, Trading Agent Design, Summer 2005 (REU)
- Andrew Simon, Trading Agent Design, Summer 2005 (REU)
- Bryan Guillemette (Dartmouth), Trading Agent Design, 2004–2005
- Jonathan Bankard, Trading Agent Design, 2004 (REU)
- Aaron Yahr (Applied Math), Auctions, Fall 2004
- Jeremy Medow (Applied Math), Auctions, Fall 2004
- Jared Mesznik (Economics), Auctions, Fall 2004
- Haru Sakai, Trading Agent Design, Summer 2004 (UTRA)
- Lucia Ballard, Trading Agent Design, Summer 2004 (UTRA)
- Margaret Benthall, Trading Agent Design, Spring 2004
- Sarah Bell, Trading Agent Design, Spring 2004
- Michael Tschantz, Trading Agent Design, 2003–2004
  presently pursuing his PhD in Computer Science at CMU
- Ioanna Grypari (Applied Math), Trading Agent Design, Spring 2003
  presently pursuing her PhD in Economics at Minnesota
- Joshua Butler, Trading Agent Design, Spring 2003
- Jesse Funaro, Trading Agent Design, Spring 2003
- Casey Marks (Applied Math), Game Theory, 2002–2003
  presently pursuing his PhD in Computer Science at Brown
- Maxence Crossley (Dartmouth), Trading Agent Design, Summer 2001
- Jesse Myers, Multiagent Learning, 2001
- Chris Chin, Financial Models, 2000
- Igor Helman, Online Trading Agents, 2000