

Bio, Judy Goldsmith

<http://www.cs.uky.edu/~goldsmi>

1988 Ph.D., Mathematics, University of Wisconsin

1985 M.A., Mathematics, University of Wisconsin

1982 A.B., Mathematics, Princeton University

EXPERIENCE

2005 – Present Professor, University of Kentucky

Fall 2006 Adjunct Professor, University of Illinois at Chicago

Spring 2000 Visitor, Boston University

Fall 1999 Visiting Scholar, University of Illinois at Chicago

1998 – 2005 Associate Professor, University of Kentucky

1993 – 1998 Assistant Professor, University of Kentucky

1991 – 1993 Assistant Professor, University of Manitoba

1990 – 1991 Visiting Professorship for Women, NSF, Boston University

1988 – 1990 John Wesley Young Research Instructor, Dartmouth

FIVE RECENT PAPERS

“Ranking Policies in Discrete Markov Decision Processes,” Peng Dai and Judy Goldsmith, *Annals of Mathematics and Artificial Intelligence*, to appear.

“The computational complexity of dominance and consistency in CP-nets”, Judy Goldsmith, Jérôme Lang, Miroslaw Truszczyński, and Nic Wilson, *Journal of Artificial Intelligence Research*, Volume 33, pages 403–432, 2008.

“Preference Handling for Artificial Intelligence,” Judy Goldsmith and Ulrich Junker, *AI Magazine*, Winter, 2008.

“The Complexity of Probabilistic Lobbying,” Gabor Erdelyi, Henning Fernau, Judy Goldsmith, Nicholas Mattei, Daniel Raible and Jrg Rothe, *Proc. 1st International Conference on Algorithmic Decision Theory*, 2009.

“Expediting RL by Using Graphical Structures,” Peng Dai, Alexander Strehl, and Judy Goldsmith, *Proc. The 7th Internat’l Conference on Autonomous Agents and Multiagent Systems (AAMAS ’08)*, pp. 1325-1328.

FIVE OTHER PAPERS

“New Horn Revision Algorithms”, Judy Goldsmith and Robert H. Sloan, *Journal of Machine Learning Research*, 6(Dec):1919–1938, 2005.

“Theory Revision with Queries: Horn and other non-DNF Forms,” with Robert H. Sloan, Balázs Szörényi, and György Turán, *Artificial Intelligence Journal* 156: (2) 139–176, July 2004.

“Nonapproximability results for Markov decision processes,” C. Lusena, J. Goldsmith, and M. Mundhenk, *Journal of AI Research* 14: 83–103, 2001.

“The complexity of finite-horizon Markov decision process problems,” M. Mundhenk, C. Lusena, J. Goldsmith, and E. Allender, *Journal of the ACM* 47: (4), 681-720, July 2000.

“The Computational Complexity of Probabilistic Plan Existence and Evaluation,” M. Littman, J. Goldsmith, and M. Mundhenk, *The Journal of AI Research*, volume 9, pages 1–36, 1998.

SYNERGISTIC ACTIVITIES

- Advising research projects by 3 undergraduates, 4 PhD students, and 4 MS students on: research on preventing sepsis in emergency room patients; helping rheumatoid arthritis patients reason about the risks and benefits of medication; building better academic advising systems, and computational social choice.
- Have worked with anthropologists and psychologists on research projects, currently working with faculty in Education and Medicine.
- Affiliate and on Steering Committee of the Cognitive Sciences Program at the University of Kentucky, and most recently taught the intro survey course on cognitive sciences in Spring '09;
- taught “Computational Decision Making” in Spring '10.
- Will be the head of the graduate certificate program on Comparative Decision Making Studies, and on the conference committee for the CDMS conference. Was PI on an 7-professor ITR on Decision-Theoretic Planning with Constraints, currently PI on “Changing Minds, Changing Probabilities,” on social choice computations under uncertainty.
- Co-organizing IJCAI '11 Doctoral Consortium. Co-organized the NSF CISE Broader Impacts Summit , June '10. Co-organized the UAI Workshop on Bayesian Applications and the AAAI Workshop on Preference Handling in AI in '07.
- Co-edited special issues of the International Journal of Approximate Reasoning based on the UAI workshop, and a special issue of AI Magazine on preferences (Winter '08-09).
- Recent PCs include: NMR '10; ICAPS '09; ADT '09; UAI '05, '06, '07; AAAI '10, '05, '06; the ECAI '10, VLDB '07, AAAI '07, ECAI '06, and IJCAI '05 Workshops on Preference handling in Artificial Intelligence.

NONREFEREES

Persons with whom the PI has collaborated in the past 48 months:

R. Crawford, University of Kentucky; A. Dekhtyar, Cal State San Louis Obispo; G. Erdélyi, Universität Düsseldorf; H. Fernau, Universität Trier; R. Finkel, University of Kentucky; R. Gehlbach, Gehlbach Consulting; B. Goldstein, University of Kentucky; J. Guerin, University of Kentucky; M. Hagen, Universität Jena; J. Hayes, University of Kentucky; C. Isenhour, University of Kentucky; U. Junker, ILOG; A. Klapper, University of Kentucky; J. Lang, IRIT; B. Laracuente, University of Kentucky; K. Laskey, George Mason University; C. Lengacher, University of Kentucky; K.K. Mathias, Humana; N. Mattei, University of Kentucky; J. Mazur, University of Kentucky; M. Mundhenk, Universität Jena; D. Raible, Universität Trier; J. Rothe, Universität Düsseldorf; R. Sloan, UIC; M. Truszczyński, University of Kentucky; N. Wilson, Cork Co. Constraint Center; L. Yi, University of Kentucky.

Advisees in last 5 years:

PhD students: Krol Kevin Mathias ('09), Liangrong Yi ('10), Joshua Guerin ('12?), Nicholas Scott Mattei ('12?), J. Shen ('13?), Radu Paul Mihail ('13?); *MS students:* D. Rempfer, M. Spradling, A. Hall III ('11?), D. Krieg ('10?), Peng Dai ('07) University of Kentucky

Total number of advisees: 2 postdocs, 7 PhD students, 13 MS students, 15 undergrads, 2 high school students

PI's advisors: D. Joseph, University of Wisconsin-Madison; M. Groszek, Dartmouth College; S. Homer, Boston University.