

Hanna M. Pasula

(617)501-9005
pasula@csail.mit.edu
<http://people.csail.mit.edu/~pasula>

32-G480, 32 Vassar Street
Massachusetts Institute of Technology
Cambridge, MA 02139

RESEARCH INTERESTS

Artificial Intelligence, in particular probabilistic AI. I am interested in developing efficient representations that combine first-order logic with probability theory, and in designing tractable inference and learning methods for such representations.

DEGREES

- Ph.D.** Computer Science, **UC Berkeley**, Fall 2003
Dissertation: Identity Uncertainty
Advisor: Professor Stuart Russell
- A.B.** Computer Science (*magna cum laude*), **Harvard University**, June 1996

DISSERTATION: Identity Uncertainty

My thesis presents a general approach for reasoning about properties of the set of objects responsible for a set of noisy observations. I propose a representation, as well as a family of approximate inference methods, and apply the work to real-world problems such as data association and citation clustering.

RESEARCH EXPERIENCE

- 2002–present **Postdoctoral associate, M.I.T**
with Professor Leslie Kaelbling.
- 1997–02 **Graduate Student Researcher, U.C. Berkeley**
with Professor Stuart Russell.
- 1994–96 **Undergraduate Research Assistant, Harvard University**
with Professor Barbara Grosz.

TEACHING EXPERIENCE

- 1996, 1997 **Teaching Assistant, U.C. Berkeley** Course: *Introduction to A.I.*
1994, 1995 **Teaching Fellow, Harvard University** Course: *Computational Hardware.*

PERSONAL

Born July 2, 1974, Warsaw, Poland. Citizenship: Polish.

PUBLICATIONS

Luke S. Zettlemoyer, Hanna M. Pasula, and Leslie Pack Kaelbling, “Learning Planning Rules in Noisy Stochastic Worlds,” *Proceedings of the Twentieth National Conference on Artificial Intelligence (AAAI-05)*, 2005.

Hanna Pasula, Luke S. Zettlemoyer, and Leslie Pack Kaelbling, “Learning Probabilistic Planning Rules,” *Proceedings of the Fourteenth International Conference on Automated Planning and Scheduling*, 2004..

Hanna Pasula, Bhaskara Marthi, Brian Milch, Stuart Russell, and Ilya Shpitser, “Identity Uncertainty and Citation Matching.” *Advances in Neural Information Processing Systems 15*, MIT Press, 2003.

Michael Shilman, Hanna Pasula, Stuart Russell, and Richard Newton, “Statistical Visual Language Models for Ink Parsing.” *AAAI Spring Symposium on Sketch Understanding*, Stanford, March 2002.

Bhaskara Marthi, Hanna Pasula, Stuart Russell, Yuval Peres, “Decayed MCMC Filtering.” *Proceedings of the Eighteenth Conference on Uncertainty in Artificial Intelligence*, Edmonton, Alberta: Morgan Kaufmann, 2002.

Hanna Pasula and Stuart Russell, “Approximate Inference For First-Order Probabilistic Languages,” *Proceedings of the Seventeenth International Joint Conference on Artificial Intelligence*, Seattle, 2001.

Hanna Pasula, Stuart Russell, Michael Ostland, and Ya’acov Ritov, “Tracking many objects with many sensors,” *Proceedings of the Sixteenth International Joint Conference on Artificial Intelligence*, Stockholm, 1999.

“Stochastic EM for Data Association,” an invited talk at the MCMC workshop, *Advances in Neural Information Processing Systems*, Denver, CO, 1999

“A Bayesian Approach to Object Identification,” the Doctoral Consortium, *The Sixteenth National Conference on Artificial Intelligence*, Orlando, FL, 1999

PROFESSIONAL SERVICE

Reviewer for the Journal of Artificial Intelligence Research (JAIR), the Journal of Machine Learning Research (JMLR), the Conference on Uncertainty in Artificial Intelligence (UAI), and the Neural Information Processing Systems Conference (NIPS).