

## DEEPAK RAMACHANDRAN

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### Education

- **University of Illinois at Urbana-Champaign** (Fall, 2003 - present)  
PhD in Computer Science, Current GPA: 4.00 / 4.00  
Advisor: Eyal Amir
- **Birla Institute of Technology and Science (BITS), Pilani, India** (1999-2003)  
Bachelor of Engineering in Computer Science with Honours. GPA : 9.8/10.00  
Senior Thesis: "Improvements to XML Processing through Typing, Normalization and Querying"

### Research Interests

Artificial Intelligence, Reinforcement Learning and Machine Learning

### Honors/Awards

- Illiac Fellowship from College of Engineering, UIUC, 2003-2006.
- 9th Rank in the Indian National Math Olympiad, 1998.
- Recipient of merit scholarship with a complete tuition waiver at BITS-Pilani for 6 semesters.
- 5th Rank in my high school examination - the All-India Senior School Certificate.
- 1st Position in the All-India Novell C Programming Contest, 2002

### Publications

- D. Ramachandran and E. Amir, *Solving Markov Decision Problems in Metric Spaces*, American Association for Artificial Intelligence (AAAI), 2007 (submitted)
- D. Ramachandran and E. Amir, *Bayesian Inverse Reinforcement Learning*, International Joint Conference on Artificial Intelligence (IJCAI), 2007 (**Nominated for Best Paper**).
- D. Ramachandran, *Using Common Sense for Decision Making in an Adventure Game*, 8th International Symposium on Logical Formalizations of Common Sense Reasoning, 2007

- D. Ramachandran, N. Boyette, I. Cheng, V. Krishna and S. Srinivasan, *Towards Scalable and Adaptive Document Routing Services*, IEEE Service Computing Conference, 2006
- D. Ramachandran and E. Amir, *Compact Propositional Encodings of First-Order Theories*, American Association for Artificial Intelligence (AAAI), 2005
- D. Ramachandran, P. Reagan, and K. Goolsbey, *First-Orderized ResearchCyc: Expressivity and Efficiency in a Common Sense Knowledge Base*, AAAI-05 Workshop on Contexts and Ontologies, 2005
- D. Ramachandran and E. Amir, *Compact Propositionalizations of First-Order Theories*, ECAI-04 Workshop on Local Computation for Logics and Uncertainty, 2004.

## Work Experience

- **IBM Research Labs, Almaden, CA:** (May 2005 - Aug 2005)  
I worked in the Business Intelligence unit. I helped develop a Business Rules framework and a failure analysis tool that used data mining techniques to discover patterns in ibm.com's B2B automation system.
- **Cycorp Inc. Austin, TX:** (June 2004 - August 2004)  
Cycorp is involved in building the largest existing Knowledge Base for common sense reasoning. I was assigned the solo project of converting a significant portion of the Cyc KB into First-order Logic and running tests with a theorem prover.
- **Central Electronics Engineering Research Institute, Chennai, India:** (May, 2001-July 2001)  
I worked under the Chief Scientist Dr. Sudhakar Rao on a "Radius Signature Method for Classification of Fruits". I worked on the implementation of these techniques in C++ and Matlab.
- **Teaching Experience:**  
I have been a teaching assistant for CS 225 (Data Structures and Algorithms) and CS 440 (Introduction to Artificial Intelligence). CS 440 involved substantial teaching and course material preparation.

## Professional Service

- Program Committee member - Second International Conference on Knowledge Science, Engineering and Management (KSEM), 2007
- Reviewer for IJCAI, AAAI, and ACM SAC.
- Coordinated the UIUC AI/Vision/Robotics seminar for Fall/Spring 2006
- Member of the Fellowships, Assistantships and Admissions Committee of the Computer Science Dept., UIUC
- Tau Beta Pi, Phi Kappa Phi