Hariharan Narayanan

EMPLOYMENT

Massachusetts Institute of Technology
Laboratory for Information and Decision Systems,
Postdoctoral Associate, *September 2009 - present*

EDUCATION

The University of Chicago, Chicago, IL
Ph.D in Computer Science, *August 2009*
M.S in Computer Science, *February 2006*
IIT Bombay, India, **Dual degree (BTech + MTech) in Elec. Engg**, *August 2003*

AWARDS AND HONORS

1. William Eckhardt Graduate Fellowship, Department of Computer Science, The University of Chicago, 2006-2007.

2. KVPY Engineering Fellowship instituted by the Government of India (awarded to 10 students nationwide during 2000-2003), 2000-2003

3. Silver Medal in the 39th International Mathematical Olympiad held in Taipei, 1998.

4. First nationwide (tied with two others) in the Indian National Mathematical Olympiad with a score of 100/100, 1997.

SELECTED PUBLICATIONS

1. *Geometric Interpretation of Halfplane Capacity.* (Lalley, Lawler, Narayanan), Elec. Comm. in Prob., 12/09

2. *Random walks on polytopes and an affine interior point method for Linear Programming.* (Kannan, Narayanan), STOC 2009, To appear in Math. of OR

3. *Geometric Complexity Theory V: On deciding nonvanishing of a generalized Littlewood -Richardson coefficient,* (Mulmuley and Narayanan), Technical Report TR-2007-05, The University of Chicago, April 2007

4. *On the complexity of computing Kostka numbers and Littlewood-Richardson coefficients,* (Narayanan) Journal of Algebraic Combinatorics, volume 24, issue 3, November 2006

5. *On the sample complexity of learning smooth cuts on a manifold,* (Narayanan and Niyogi), COLT, June 2009

6. *Heat flow and a faster algorithm to compute the surface area of a convex body.* (Belkin, Narayanan, Niyogi), FOCS 2006

7. *On the relation between low density separation, spectral clustering and graph cuts,* (Narayanan, Belkin, Niyogi), NIPS 2006

SERVICE

Refereed for International Journal of Computer Vision, Random Structures and Algorithms, International Conference on Algorithmic Learning Theory(ALT), Symposium on Theory of Computing (STOC), Symposium on Foundations of Computer Science (FOCS), Symposium on Discrete Algorithms (SODA)