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Research Interests

Approximation Algorithms, Graph Partitioning, Online Learning, Wireless Sensor Networks.

Education

- **University of California, Berkeley**

Currently pursuing a Ph.D. in Computer Science (2005-present)

Advisor: Satish Rao

GPA: 4.0/4.0

Relevant Courses: Randomness & Computation, Monte Carlo Markov Chain Methods, Statistical Learning Theory, Quantum Computing, PCP & Hardness of Approximation, Differential Geometry.

- **Princeton University**

A.B. summa cum laude in Computer Science (2001-2005)

GPA: 3.97/4.00

Relevant Courses: Theory of Algorithms, Graph Theory, Theory of Computation, Complexity Theory, Cryptography, Computational Genomics, Stochastic Systems, Discrete Mathematics, Algebra, Probability Theory, Advanced Programming Techniques.

Publications

- **On Partitioning Graphs via Single Commodity Flows**

with Leonard Schulman, Umesh V. Vazirani and Nisheeth K. Vishnoi. To appear in *STOC 2008*.

- **Broadcasting in Wireless Sensor Networks via Sparse Overlays**

with Devdatt Dubhashi, Olle Häggström, Alessandro Panconesi, Chiara Petrioli and Andrea Vitaletti. *Algorithmica*, 49-4, December 2007.

- **Localized Techniques for Broadcasting in Wireless Sensor Networks**

with Alessandro Panconesi, Chiara Petrioli and Andrea Vitaletti. *DIALM-POMC 2004*, Joint Workshop on the Foundations of Mobile Computing, Philadelphia, October 2004.

Technical Reports

- **On a Cut-Matching Game for the Sparsest Cut Problem**

with Rohit Khandekar, Subhash Khot and Nisheeth Vishnoi.

EECS Department, University of California, Berkeley, Tech. Rep. UCB/EECS-2007-177, Dec. 2007.

Other Research and Teaching Experiences

- **Teaching Assistant:** CS70 - Discrete Mathematics & Probability Theory, UC Berkeley, Fall 2006.

- **Teaching Assistant:** CS170 - Algorithms & Intractable Problems, UC Berkeley, Fall 2006.

- **Summer Intern:** Dipartimento di Informatica, Università La Sapienza, Roma. Summer 2004.

Technical Skills

- *Platforms:* MS Windows, Linux.
- *Languages:* C, Matlab and Perl. Also worked with C++, Java and AMPL.

Awards

- Outstanding Graduate Student Instructor, UC Berkeley, Fall 2006
- Princeton University Shapiro's Prize for Academic Excellence (2001-2002) and (2002-2003)

References

- **Satish Rao** (satishr@cs.berkeley.edu)
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- **Nisheeth Vishnoi** (nisheeth.vishnoi@gmail.com)
IBM India Research Lab, New Delhi, India