

Ashwinkumar Badanidiyuru Varadaraja

CONTACT INFORMATION	Office 488 Rhodes Hall Department of Computer Science Ithaca, New York 14853 Residence A34, 312 Thurston Avenue Ithaca, New York 14850	E-mail: ashwin85@cs.cornell.edu Mobile: 607-220-6070 Citizenship: Indian http://www.cs.cornell.edu/~ashwin85
EDUCATION	August 2008 - Present Doctoral Student in Computer Science Advisor: Prof. Robert Kleinberg Cornell University G.P.A.: 4.128/4.00 August 2004 - May 2008 Bachelor of Technology (<i>B.Tech</i>) in Computer Science and Engineering Indian Institute of Technology Madras Cumulative G.P.A.: 9.43/10	
RESEARCH INTEREST	Game theory and Social networks, Submodular and Combinatorial optimization, Approximation algorithms, Online algorithms.	
PUBLICATIONS	<ul style="list-style-type: none">• “Approximating Low-Dimensional Coverage Problems” with Robert Kleinberg, Hooyeon Lee. (To appear at SOCG 2012),(CoRR, abs/1112.0689)• “Sketching Valuation Functions” with Shahar Dobzinski, Hu Fu, Robert Kleinberg, Noam Nisan and Tim Roughgarden. (SODA 2012)• “Buyback Problem - Approximate Matroid Intersection with Cancellation Costs” (ICALP 2011)• “Randomized Online Algorithms for the Buyback Problem” with Robert Kleinberg. (WINE 2009)• “On Tradeoff Between Network Connectivity, Phase Complexity and Communication Complexity of Reliable Communication Tolerating Mixed Adversary” with Arpita Patra, Ashish Choudhary, Kannan Srinathan and C. Pandu Rangan. (PODC 2008)	
UNDER SUBMISSION/PREPARATION	<ul style="list-style-type: none">• “Optimization with Demand Oracles” with Shahar Dobzinski, Sigal Oren (CoRR, abs/1107.2869)• “Learning on a Budget: Posted Price Mechanisms for Online Procurement” with Robert Kleinberg, Yaron Singer	
RESEARCH EXPERIENCE	<ul style="list-style-type: none">• On Low dimensional coverage and Submodular Optimization under Prof Robert Kleinberg being pursued currently.• On Online Auctions pursued under Prof Robert Kleinberg during summer 2009.• On Data Privacy under Prof Johannes Gehrke during Fall 2009.	

- On Secure and Reliable Multiparty computation under Dr C. Pandu Rangan for Undergraduate thesis.
- Research Internship at Northeastern University, Boston, MA, US from May to July 2007 under Prof. Ravi Sundaram. Focus on Approximation Algorithms.

TEACHING
EXPERIENCE
(TEACHING
ASSISTANT)

- Fall 09 - Analysis of Algorithms (Graduate course)
- Spring 09 - Introduction to Analysis of Algorithms (Undergraduate course)
- Fall 08 - Java Programming

COURSES TAKEN
AT CORNELL

Analysis of Algorithms, Structure of Information Networks, Complexity theory, Undergraduate Algebra, Combinatorial Optimization, Algorithmic Game theory, Information theory, Probability, Database Systems.

COURSES TAKEN
AT IIT

Advanced Courses:- Cryptography, Advanced Algorithms, Distributed Algorithms, Quantum Computation and Quantum Information,

Mathematics Courses:- Elements of Calculus, Vector Matrices and Differential Equations 2, Basic Graph Theory, Probability and Random Processes, Linear Algebra.

Core courses:- Switching Theory and Digital Design, Languages Machines and Computation, Principles of Communication, Computer Organization, Data Structures and Algorithms, Paradigms of Programming, Language Translators, Operating Systems, Introduction to Database Systems, Computer Networks, Principles of Software Engineering, Pattern Recognition, Computer System Design.

HONORS

- Rated Topcoder Member with Highest 1536 Points.
- Secured an **All India Rank** of **348** in the **IIT JEE** Main Examination.

REFERENCES

On request