

Karthekeyan Chandrasekaran

CONTACT INFORMATION	Room 2116, Klaus Advanced Computing Building 266, Ferst Drive, Atlanta, GA 30332 <i>Email:</i> karthe@gatech.edu <i>Mobile:</i> 1-404-567-9756	Graduate Student College of Computing Georgia Institute of Technology <i>WWW:</i> http://www.cc.gatech.edu/~karthe
RESEARCH INTERESTS	Randomized algorithms, Probabilistic methods and analysis, Markov chain Monte Carlo methods, Derandomization.	
EDUCATION	Ph.D. in Algorithms, Combinatorics and Optimization Georgia Institute of Technology, Atlanta	– (Expected) Jul 2012
	B.Tech. in Computer Science and Engineering Indian Institute of Technology, Madras Final GPA - 9.45/10	– Jun 2007
PUBLICATIONS	Algorithms for Implicit Hitting Set Problems (with R. Karp, E. Moreno-Centeno, S. Vempala) - ACM-SIAM Symposium on Discrete Algorithms (SODA11), Jan 2011.	
	Deterministic Algorithms for the Lovász Local Lemma (with N. Goyal, B. Haeupler) - ACM-SIAM Symposium on Discrete Algorithms (SODA10), Jan 2010. - To appear in SIAM Journal of Computing (SICOMP).	
	Thin Partitions: Isoperimetric Inequalities and Sampling Algorithms for some Non-convex Families (with D. Dadush, S. Vempala) - ACM-SIAM Symposium on Discrete Algorithms (SODA10), Jan 2010.	
	Sampling s-Concave Functions (with A. Deshpande, S. Vempala) - 13th International Workshop on Randomization and Computation (RANDOM 2009), Aug 2009.	
	An Observation about Variations of the Diffie-Hellman Assumption (with R. Bhaskar, S. V. Lokam, P. L. Montgomery, R. Venkatesan, Y. Yacobi) - Serdica Journal of Computing (Vol.3, No.3), 2009.	
	Vulnerabilities in Anonymous Credential Systems (with R. Bhaskar, S. V. Lokam, P. L. Montgomery, R. Venkatesan, Y. Yacobi) - 3rd International Workshop on Security and Trust Management (STM 07), Sep 2007.	
IN SUBMISSION	A Discrepancy based Approach to Integer Programming (with S. Vempala) - arXiv: http://arxiv.org/abs/1111.4649	
	Finding the Most Biased Coin with Fewest Flips (with R. Karp) - arXiv: http://arxiv.org/abs/1202.3639	

INVITED LECTURES AND CONFERENCE TALKS	A Discrepancy based Approach to Integer Programming	
	Discrete Optimization Seminar, Georgia Institute of Technology, Atlanta.	– Jan 2012
	INFORMS '11, Charlotte.	– Nov 2011
	Microsoft Research, Silicon Valley.	– Nov 2011
	IBM Research, Almaden.	– Sep 2011
	University of California, Berkeley.	– Aug 2011
	Algorithms for Implicit Hitting Set Problems	
	Random Structures and Algorithms, Atlanta.	– May 2011
	ACM-SIAM Symposium on Discrete Algorithms 2011, San Francisco.	– Jan 2011
	Microsoft Research, Bangalore.	– Dec 2010
	Indian Institute of Technology, Madras.	– Dec 2010
	ACO Student Seminar, Georgia Institute of Technology, Atlanta.	– Apr 2010
	Algorithms for the Lovász Local Lemma	
	Indian Institute of Technology, Madras.	– Dec 2010
	Combinatorics Seminar, Georgia Institute of Technology, Atlanta.	– Sep 2009
	Sampling Star-shaped Bodies	
Microsoft Research, Bangalore.	– Jul 2009	
Sampling s-Concave Functions		
INFORMS '09, San Diego.	– Oct 2009	
RANDOM-APPROX 2009, Berkeley.	– Aug 2009	
Microsoft Research, Bangalore.	– Jun 2009	
WORK EXPERIENCE	International Computer Science Institute (ICSI), Berkeley	
	Visiting Researcher, Algorithms Group.	
	Host: Richard Karp	– Jul-Oct 2011
	Microsoft Research, Bangalore	
	Research Intern, Algorithms Research Group.	
	Host: Amit Deshpande	– Summer 2008
	Host: Navin Goyal	– Summer 2009
	Microsoft Research, Bangalore	
	Research Intern, Cryptography, Security and Applied Mathematics Group.	
	Host: Satya V. Lokam	– Summer 2007
Microsoft Research, Redmond		
Cryptography and Anti-piracy Group, Microsoft Research, Redmond.		
Host: Ramarathnam Venkatesan	– Summer 2006	
TEACHING EXPERIENCE	Computability and Algorithms	
	Georgia Institute of Technology Teaching assistant and guest lecturer for divide and conquer Responsible for designing problems for homework, recitation and exams and conducting office hours.	– Spring 2012

AWARDS AND
HONORS

Algorithms and Randomness Center (ARC) Fellowship
Georgia Institute of Technology.

– Fall 2010, Spring 2012

National Merit Scholarship
Indian Institute of Technology, Madras.

– 2003-2007.

PROFESSIONAL
SERVICE

Reviewer for conferences
– FOCS (2010), NIPS (2010), STOC (2011), LATIN (2012).

Reviewer for journals
– *Journal of Computer and System Sciences* (JCSS), *Mathematics of Operations Research*, *SIAM Journal on Discrete Mathematics* (SIDMA).

REFERENCES

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