т 609-216-2704

ANUP RAO

RESEARCH INTERESTS	Pseudorandomness, Complexity, Coding Theory, Combinatorics	
EDUCATION	TION UNIVERSITY OF TEXAS AT AUSTIN Austin, $TX - Ph.D.$, 2003-2007 Computer Science. Thesis: "Randomness Extractors for Independent Sources and Applications"	
	GEORGIA INSTITUTE OF TECHNOLOGY Atlanta, GA — B.S., B.S., 1998-2002 Bachelors' in Mathematics and Computer Science	
HONORS AND AWARDS	BEST STUDENT PAPER AWARD ACM Symposium On Theory of Computing, 2006	
	DEAN'S EXCELLENCE AWARD University of Texas at Austin, 2003	
	MCD FELLOWSHIP University of Texas at Austin, 2003	
	BEST MATH SENIOR Georgia Institute of Technology, 2002	
	PRESIDENT'S AWARD FOR UNDERGRADUATE RESEARCH Georgia Institute of Technology, 2002	
	J. C. CURRIE AWARD Georgia Institute of Technology, 2002	
EXPERIENCE	POSTDOCTORAL RESEARCHER Institute for Advanced Study, Princeton, NJ Working on various problems in theoretical computer science.	2007-2009
	RESEARCH ASSISTANT University of Texas at Austin, Austin, TX Worked on problems in theoretical computer science under David Zucke	2003-2007 erman.
	RESEARCH ASSISTANT Georgia Institute of Technology, Atlanta, GA Worked under Mary Jean Harrold and the Aristotle Research Group. De technique to enable object oriented programs to update themselves at ru wrote software to aid in distributed testing.	<i>2001-2002</i> eveloped a ntime and
	RESEARCH ASSISTANT <i>Georgia Institute of Technology, Atlanta, GA</i> Worked under Richard Fujimoto. Designed and implemented a network terface two protocols and software to control network simulations.	2000-2001 a layer to in-
	TEACHING ASSISTANT University of Texas at Austin, Austin, TX Graduate combinatorics, randomized algorithms, discrete mathematics, tional learning theory.	2005-2006 computa-
	TEACHING ASSISTANT Georgia Institute of Technology, Atlanta, GA	2001-2002

Undergraduate C programming. CONFERENCE COMMITTEES 41st ACM Symposium on Theory of Computing (STOC), 2009. PC Member JOURNAL REFEREEING SIAM Journal of Discrete Mathematics (SIDMA) Theory of Computing (ToC) Random Structures and Algorithms (RSA) Foundations and Trends in Theoretical Computer Science CONFERENCE REFEREEING IEEE Foundations of Computer Science (FOCS) ACM Symposium on Theory of Computing (STOC) IEEE Conference on Computational Complexity (CCC) International Workshop on Randomized Techniques in Computation (RANDOM) ACM-SIAM Symposium on Discrete Algorithms (SODA) International Colloquium on Automata, Languages and Programming (ICALP) INVITED TUTORIAL TALK WORKSHOP ON RANDOMIZATION AND COMPUTATION Cambridge, MA August 2008 Survey of Parallel Repetition Results. **INVITED TALKS** UNIVERSITY OF WASHINGTON Seattle, WA December 2008 Theory Seminar. BERKELEY Berkeley, CA December 2008 Theory Seminar. NEW YORK UNIVERSITY New York, NY October 2008 Cryptography Seminar. DIMACS CENTER, RUTGERS UNIVERSITY New Brunswick, NJ September 2008 Theory Seminar. BANFF INTERNATIONAL RESEARCH STATION Banff, Alberta, Canada August 2008 Workshop: "Analytic Methods in Computational Complexity." GEORGIA INSTITUTE OF TECHNOLOGY April 2008 Atlanta, GA Algorithms and Randomness Center Colloquium. INSTITUTE FOR PURE AND APPLIED MATHEMATICS Los Angeles, CA February 2008 Workshop: "Expanders in Pure and Applied Mathematics." COLUMBIA UNIVERSITY New York, NY November 2007 Computer Science Theory Seminar DAGSTUHL September 2007 Wadern, Germany

Workshop: "Algebraic Methods in Computational Complexity."		
TSINGHUA UNIVERSITY <i>Beijing, China</i> Workshop: "China Theory Week."	September 2007	
OBERWOLFACH <i>Oberwolfach, Germany</i> Workshop: "Computational Complexity."	July 2007	
MASSACHUSETTS INSTITUTE OF TECHNOLOGY <i>Cambridge, MA</i> Theory Colloquium	March 2007	
INSTITUTE FOR ADVANCED STUDY <i>Princeton, NJ</i> Computer Science / Discrete Math Seminar	November 2006	
BANFF INTERNATIONAL RESEARCH STATION <i>Banff, Canada</i> Workshop: "Recent Advances in Computational Complexity."	August 2006	
WEIZMANN INSTITUTE OF SCIENCE <i>Rehovot, Israel</i> Computer Science Theory Seminar	July 2006	
TEL AVIV UNIVERSITY <i>Tel Aviv, Israel</i> Computer Science Theory Seminar	June 2006	
TECHNION <i>Haifa, Israel</i> Computer Science Theory Seminar	June 2006	
GEORGIA INSTITUTE OF TECHNOLOGY <i>Atlanta, GA</i> Computer Science Theory Seminar	June 2006	
INSTITUTE FOR ADVANCED STUDY Princeton, NJ Computer Science / Discrete Math Seminar	October 2005	
JOURNAL PUBLICATIONS		
 Anup Rao. Parallel Repetition in Projection Games and a Concentration E Invited to SICOMP Special Issue for STOC 2008. 	Bound	
Anup Rao. Extractors for a Constant Number of Polynomially Small Entropy Independent Sources. Invited to SICOMP Special Issue for STOC 2006.		
CONFERENCE PROCEEDINGS		
1. Boaz Barak, Mark Braverman, Xi Chen, Anup Rao and Avi Wigderson.		

Direct Sums in Randomized Communication Complexity Manuscript, 2008.

PUBLICATIONS

- Anup Rao. Extractors for Low-Weight Affine Sources. Manuscript, 2008.
- Guy Kindler, Ryan O'Donnell, Anup Rao and Avi Wigderson. Spherical Cubes and Rounding in High Dimensions. 49th Annual IEEE Symposium on Foundations of Computer Science (FOCS), 2008.
- Yael Tauman Kalai, Xin Li, Anup Rao and David Zuckerman. Network Extractor Protocols.
 49th Annual IEEE Symposium on Foundations of Computer Science (FOCS), 2008.
- Boaz Barak, Ishay Haviv, Moritz Hardt, Anup Rao, Oded Regev and David Steurer.
 Rounding Parallel Repetitions of Unique Games.
 49th Annual IEEE Symposium on Foundations of Computer Science (FOCS), 2008.
- Anup Rao and David Zuckerman. Extractors for Three Uneven-Length Sources. 12th Intl. Workshop on Randomization and Computation (RANDOM), 2008.
- Anup Rao.
 A 2-Source Almost-Extractor for Linear Entropy.
 12th Intl. Workshop on Randomization and Computation (RANDOM), 2008.
- Anup Rao.
 Parallel Repetition in Projection Games and a Concentration Bound. 40th Annual ACM Symposium on Theory of Computing (STOC), 2008.
- 9. Anup Rao.

Extractors for a Constant Number of Polynomially Small Min-Entropy Independent Sources. *38th Annual ACM Symposium on Theory of Computing (STOC)*, 2006. Co-winner of the Danny Lewin Best Student Paper Award.

- Boaz Barak, Anup Rao, Ronen Shaltiel and Avi Wigderson.
 2-Source Dispersers for Sub-Polynomial Entropy and Ramsey Graphs Beating the Frankl-Wilson Construction.
 38th Annual ACM Symposium on Theory of Computing (STOC), 2006.
- Jesse Kamp, Anup Rao, Salil Vadhan and David Zuckerman. Deterministic Extractors for Small Space Sources. 38th Annual ACM Symposium on Theory of Computing (STOC), 2006.
- Alessandro Orso, Anup Rao and Mary Jean Harrold. A Technique for Dynamic Updating of Java Software. International Conference on Software Maintenance, 2002, pp. 649-658.