

ABISHEK SANKARARAMAN

CONTACT INFORMATION	1626 W.6th St, Unit A Austin, Texas, 78703	Mobile: +1 5126985191 Email: abishek@utexas.edu
INTERESTS	Machine Learning, Multi-Agent Systems, Random Graphs and Social Networks, Randomized Algorithms, Distributed Algorithms	
EDUCATION	The University of Texas at Austin <i>Ph.D. in Electrical and Computer Engineering</i> • Advisor: François Baccelli Indian Institute of Technology, Madras <i>B.Tech in Electrical Engineering</i> <i>M.Tech in Communication Systems and Signal Processing</i> <i>Minor in Mathematics</i> • Graduated ranked 1 st in the Department.	Jan. 2013 - Present 2008 - 2013
WORK EXPERIENCE	Wireless Networking and Communications Group (WNCG), UT Austin Graduate Research Assistant. Advisor: François Baccelli Simons Center for Network Mathematics Graduate Research Assistant. Advisor: François Baccelli Huawei Research Labs Data Science Intern. Manager: Hui Zang	Austin, TX Jan 2014-Present Austin, TX Jan 2014-Present Santa Clara, CA May - Aug, 2015
PUBLICATIONS	<ol style="list-style-type: none">Social Learning in Multi-Agent Multi-Armed Bandit Problem A. Sankararaman, Ayalvadi Ganesh and Sanjay Shakkottai Under Submission. Paper available on request.Interference Queuing Networks on Grids A. Sankararaman, François Baccelli and Sergey Foss Annals of Applied Probability (<i>To Appear</i>).Community Detection on Euclidean Random Graphs A.Sankararaman, Emmanuel Abbe and François Baccelli In <i>ACM-SIAM Symposium on Discrete Algorithms (SODA)</i>, 2018. Extended Abstract in <i>55th Allerton Conference</i>, 2017. Full Version Under Review at IMA Information and Inference.Spatial Birth-Death Wireless Networks A.Sankararaman and François Baccelli In <i>IEEE Transactions on Information Theory</i>, 63(6):3964–3982, 2017. Preliminary Version in <i>54th Allerton Conference</i>, October 2016.Performance-Oriented Association in Large Cellular Networks with Technology Diversity A.Sankararaman, Jeong woo Cho and François Baccelli In <i>2016 28th International Teletraffic Congress (ITC 28)</i>, Vol. 1, pp 94-102. Sep 2016, IEEE.CSMA k-SIC: A class of distributed MAC protocols and their performance evaluation A.Sankararaman and François Baccelli In <i>2015 IEEE Conference on Computer Communications (INFOCOM)</i>, pages 2002-2010, April 2015.	
WORKING PAPERS	<ol style="list-style-type: none">Haplotype Phasing Through Euclidean Community Detection with H. Vikalo and F. BaccelliDistributed Bandit Algorithms in a Dynamic Changing Environment with R. Chawla, S. Shakkottai and A. Ganesh	

TEACHING AND MENTORSHIP	Teaching Assistant, <i>Advanced Probability - Inference and Learning</i> <i>The University of Texas at Austin</i>	Spring 2018
	Duties include holding office hours, setting homework and exam problems.	
	Undergraduate Student Mentor - <i>Mixing Times for Random Walks on Groups</i> <i>Primary mentor for an undergraduate student project in the Mathematics Department</i>	Spring 2018
	My main duty is to propose a research topic to the student and then aid in executing it. We decided to study mixing times for random walks on groups, in particular the cutoff-phenomenon. At the end of the project, the student is expected to give a public seminar on the project.	
TALKS AND PRESENTATIONS	<ul style="list-style-type: none"> • <i>Interference Queuing Networks on Grids</i> Talk at UNC-Chapel Hill Probability Seminar, Chapel Hill, NC. Talk at Austin-TAMU Probability Seminar, Austin, TX. Talk at Heriot-Watt University, Edinburgh UK • <i>Community Detection on Euclidean Random Graphs</i> Talk at MIT Research Laboratory of Electronics, Cambridge MA Talk at University of Massachusetts, Amherst, MA Talk at Indian Institute of Technology Madras, Chennai Talk at ACM-SIAM SODA Conference, New Orleans, LA Talk at The University of Texas at Austin • <i>Spatial Birth Death Process on the Continuum</i> Talk at Indian Institute of Technology Madras, Chennai Talk at Princeton University Talk at Allerton Conference on Communication Control and Computing Talk at INRIA - Ecole Normale Supérieure, Paris • <i>Technology Diversity - A Framework for Base Station Association in Large Cellular Networks</i> Talk at 28th, International Teletraffic Congress (ITC-28), Würzburg, Germany • <i>CSMA k-SIC: A Class of MAC Protocols</i> Talk at IEEE INFOCOM, Hong Kong 	 Feb 2019 May 2018 Feb 2018 Dec 2018 Dec 2018 Jan 2018 Jan 2018 May 2017 Jan 2017 Nov 2016 Oct 2016 Sep 2016 Sep 2016 May 2015
PROFESSIONAL SERVICES	<ul style="list-style-type: none"> • Reviewer for IEEE ISIT (International Symposium on Information Theory) • Reviewer for Queueing Systems Journal • Reviewer for ACM-SIAM SODA (Symposium on Discrete Algorithms) • Reviewer for IEEE FOCS (Foundations of Computer Science) • Reviewer for SpaSWIN (Spatial Stochastic Models for Wireless Networks) • Reviewer for Performance Evaluation • Reviewer for IEEE Transactions on Information Theory • Reviewer for IEEE Transactions on Wireless Communications 	 2019 2019 2019 2018 2018 2017 2016 2015-2019
REFERENCES	On Request	