

ABISHEK SANKARARAMAN

INTERESTS	Online Learning, Clustering, Random Graphs, Stochastic Networks,	
EDUCATION	The University of Texas at Austin <i>Ph.D. in Electrical and Computer Engineering</i>	Sep. 2013 - Sep 2019
	<ul style="list-style-type: none">• Thesis: Spatial Stochastic Models for Network Analysis• Advisor: François Baccelli	
	Indian Institute of Technology, Madras B.Tech and M.Tech in Electrical Engineering, Minor in Mathematics GPA: 9.23/10	Aug 2008 - May 2013
EMPLOYMENT	University of California, Berkeley Postdoctoral Researcher, Advisor: Venkat Anantharam	Berkeley, CA Sep 2019 - Present
	Simons Center for Network Mathematics Graduate Research Assistant. Advisor: François Baccelli	Austin, TX Jan 2014-Present
	Huawei Research Labs Data Science Intern. Manager: Hui Zang	Santa Clara, CA May - Aug, 2015
RESEARCH	<u>Machine Learning</u>	
	The Gossiping Insert-Eliminate Algorithm for Multi Agent Multi Armed Bandits Ronshee Chawla*, A. Sankararaman*, Ayalvadi Ganesh and Sanjay Shakkottai AISTATS 2020 * Equal Contribution	
	Social Learning in Multi-Agent Multi-Armed Bandit Problem A. Sankararaman, Ayalvadi Ganesh and Sanjay Shakkottai ACM SIGMETRICS 2020	
	ComHapDet: A Spatial Community Detection Algorithm for Haplotype Assembly A. Sankararaman, Haris Vikalo and François Baccelli BMC Genomics, 2020 (To Appear). Extended Abstract in ACM CNB-MAC 2019.	
	Community Detection on Euclidean Random Graphs A.Sankararaman, Emmanuel Abbe and François Baccelli ACM-SIAM Symposium on Discrete Algorithms (SODA), 2018. Full Version in Information and Inference : A journal of the IMA, 2020. Extended Abstract in Allerton, 2017.	
	<u>Applied Mathematics</u>	
	Interference Queuing Networks on Grids A. Sankararaman, François Baccelli and Sergey Foss Annals of Applied Probability , October 2019, Vol. 29, No. 5, 2929-2987.	
	<u>Network Algorithms</u>	
	Spatial Birth-Death Wireless Networks A.Sankararaman and François Baccelli IEEE Transactions on Information Theory , June 2017, 63 (6), 3964-3982. Extended Abstract in Allerton 2016.	
	Performance-Oriented Association in Large Cellular Networks with Technology Diversity A.Sankararaman, Jeong woo Cho and François Baccelli International Teletraffic Congress (ITC), 2016.	
	CSMA k-SIC: A class of distributed MAC protocols and their performance evaluation A.Sankararaman and François Baccelli IEEE Conference on Computer Communications (INFOCOM), 2015.	

TEACHING AND MENTORSHIP	Teaching Assistant, <i>Advanced Probability - Inference and Learning</i>	Spring 2018
	Teaching Assistant, <i>Probability and Stochastic Processes (Graduate)</i> Duties include holding office hours, setting homework and exam problems.	Fall 2018
	Undergraduate Student Mentor - <i>Mixing Times for Random Walks on Groups</i> Research supervisor for an undergraduate student project in the Mathematics Department	Spring 2018
LEADERSHIP	<ul style="list-style-type: none"> WNCG Student Leadership Award 	2018.
TALKS	<ul style="list-style-type: none"> <i>Interference Queuing Networks on Grids</i> Talk at INFORMS Applied Probability Society, Brisbane, Australia. Jul 2019 Talk at UNC-Chapel Hill Probability Seminar, Chapel Hill, NC. Feb 2019 Talk at Austin-TAMU Probability Seminar, Austin, TX. May 2018 Talk at Heriot-Watt University, Edinburgh UK Feb 2018 <i>Community Detection on Euclidean Random Graphs</i> Talk at AMS Special Session on Stochastic Spatial Models, at the 2020 Joint Mathematics Meeting, Denver CO Jan 2020 Talk at MIT Research Laboratory of Electronics, Cambridge MA Dec 2018 Talk at University of Massachusetts, Amherst, MA Dec 2018 Talk at Indian Institute of Technology Madras, Chennai Jan 2018 Talk at ACM-SIAM SODA Conference, New Orleans, LA Jan 2018 Talk at The University of Texas at Austin May 2017 <i>Spatial Birth Death Process on the Continuum</i> Talk at Indian Institute of Technology Madras, Chennai Jan 2017 Talk at Princeton University Nov 2016 Talk at Allerton Conference on Communication Control and Computing Oct 2016 Talk at INRIA - Ecole Normale Supérieure, Paris Sep 2016 <i>Technology Diversity - A Framework for Base Station Association in Large Cellular Networks</i> Talk at 28th, International Teletraffic Congress (ITC-28), Würzburg, Germany Sep 2016 <i>CSMA k-SIC: A Class of MAC Protocols</i> Talk at IEEE INFOCOM, Hong Kong May 2015 	
PROFESSIONAL SERVICES	<ul style="list-style-type: none"> Reviewer for Journal of Applied Probability (JAP), 2019-2020 Organizer for Random Structures Seminar at UT Austin Math dept. 2017-2019 Reviewer for IEEE ISIT (International Symposium on Information Theory) 2019 Reviewer for Queueing Systems Journal 2019 Reviewer for ACM-SIAM SODA (Symposium on Discrete Algorithms) 2019 Reviewer for IEEE FOCS (Foundations of Computer Science) 2018 Reviewer for SpaSWIN (Spatial Stochastic Models for Wireless Networks) 2018 Reviewer for Performance Evaluation 2017 Reviewer for IEEE Transactions on Information Theory 2016-2019 Reviewer for IEEE Transactions on Wireless Communications 2015-2019 	
REFERENCES	<p>François Baccelli Simons Chair, Dept of ECE and Mathematics, The University of Texas at Austin, Austin, TX, USA. baccelli@math.utexas.edu</p> <p>Sanjay Shakkottai Department of ECE, The University of Texas at Austin, Austin, TX, USA. shakkott@austin.utexas.edu</p> <p>Sergey Foss, School of Mathematical Sciences, Heriot-Watt University, Edinburgh EH14 4AS, UK. s.foss@hw.ac.uk</p>	