

# ABISHEK SANKARARAMAN

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

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"> <li>WNCG Student Leadership Award</li> </ul>	2018.
TALKS	<ul style="list-style-type: none"> <li><i>Interference Queuing Networks on Grids</i> Talk at INFORMS Applied Probability Society, Brisbane, Australia. 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</li> <li><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</li> <li><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</li> <li><i>Technology Diversity - A Framework for Base Station Association in Large Cellular Networks</i> Talk at 28th, International Teletraffic Congress (ITC-28), Würzburg, Germany</li> <li><i>CSMA k-SIC: A Class of MAC Protocols</i> Talk at IEEE INFOCOM, Hong Kong</li> </ul>	Jul 2019 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"> <li>Reviewer for Journal of Applied Probability (JAP),</li> <li>Organizer for Random Structures Seminar at UT Austin Math dept.</li> <li>Reviewer for IEEE ISIT (International Symposium on Information Theory)</li> <li>Reviewer for Queueing Systems Journal</li> <li>Reviewer for ACM-SIAM SODA (Symposium on Discrete Algorithms)</li> <li>Reviewer for IEEE FOCS (Foundations of Computer Science)</li> <li>Reviewer for SpaSWIN (Spatial Stochastic Models for Wireless Networks)</li> <li>Reviewer for Performance Evaluation</li> <li>Reviewer for IEEE Transactions on Information Theory</li> <li>Reviewer for IEEE Transactions on Wireless Communications</li> </ul>	2019-2020 2017-2019 2019 2019 2019 2018 2018 2017 2016-2019 2015-2019
REFERENCES	<p>François Baccelli Simons Chair, Dept of ECE and Mathematics, The University of Texas at Austin, Austin, TX, USA. <a href="mailto:baccelli@math.utexas.edu">baccelli@math.utexas.edu</a></p> <p>Sanjay Shakkottai Department of ECE, The University of Texas at Austin, Austin, TX, USA. <a href="mailto:shakkott@austin.utexas.edu">shakkott@austin.utexas.edu</a></p> <p>Sergey Foss, School of Mathematical Sciences, Heriot-Watt University, Edinburgh EH14 4AS, UK. <a href="mailto:s.foss@hw.ac.uk">s.foss@hw.ac.uk</a></p>	