NIKHIL SRIVASTAVA

CONTACT
INFORMATION

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Department of Mathematics   *email: nikhil@math.berkeley.edu*
UC Berkeley, Berkeley CA 94720.   *url: http://math.berkeley.edu/∼nikhil*

EDUCATION

Yale University, New Haven, CT.   *May '10*
Ph.D. in Computer Science. Advisor: Daniel Spielman.
Dissertation: "Spectral Sparsification and Restricted Invertibility."

Union College, Schenectady, NY.   *Jun '05*
B.S., *summa cum laude*, Mathematics and Computer Science. Minor in English.
Phi Beta Kappa ('04), George H. Catlin Prize, Resch Prize in Mathematics,
Williams Prize in Computer Science, Hale Prize in English ('04).

POSITIONS HELD

University of California, Berkeley, Berkeley, CA.
Associate Professor of Mathematics   *Jul'20–*
Assistant Professor of Mathematics   *Jan'15–Jun'20*

Microsoft Research, Bangalore, India.
Researcher, Algorithms Group   *Jul'12–Dec'14*
Research Intern & Visitor, Algorithms Group   *Jul–Sep '08 & '10*

Simons Institute for the Theory of Computing, Berkeley, CA.
Microsoft Research India Fellow, Big Data Program.   *Sep–Dec'13*

Princeton University, Princeton, NJ.
Postdoctoral Researcher, Computer Science Department   *Jan–Jun'12*

Mathematical Sciences Research Institute, Berkeley, CA.
Postdoctoral Member, Quantitative Geometry Program.   *Aug–Dec'11*

Institute for Advanced Study, Princeton, NJ.
Member, School of Mathematics   *Sep '10–Jul '11*

Microsoft Research, Mountain View, CA.
Research Intern, Theory Group   *Jun–Aug '09*

AWARDS

AMS Foias Prize, 2022.
NAS Held Prize, 2021.
Alfred P. Sloan Research Fellowship, 2016. (USD 55,000)
NSF CAREER Award, 2016. (USD 420,000 approx.)
SIAM George Pólya Prize, 2014.
Invited speaker, International Congress of Mathematicians, Seoul, 2014.
Best paper award, IEEE Symposium on Foundations of Computer Science, 2013.

TEACHING &
ADVISING

Doctoral Students Advised. All at UC Berkeley.
Nick Ryder, PhD 2019. Researcher at OpenAI.
Aaron Schild (co-advised with Satish Rao, EECS), PhD 2019. Researcher at Google Research.
Archit Kulkarni, PhD 2020. Anyscale.
Satyaki Mukherjee, PhD 2021. Postdoc at TU Munich.
Jess Banks, PhD 2022. Stanford Science Fellow.
Jorge Garza Vargas (co-advised with Dan Voiculescu), PhD 2022. Postdoc at Caltech.
Theo McKenzie, PhD 2022. Postdoc at Harvard + Stanford Science Fellow.

Rikhav Shah, 4th year.
Zack Stier, 3rd year.

University of California, Berkeley, CA. *Instructor*

Berkeley Connect.	*Fall'22, Spring'21, Spring'20, Spring'18, Fall'18, Spring'17*
Math 55, Discrete Mathematics. (200+ students)	*Spring'16, Fall'21, Fall'22*
Math 54, Linear Algebra and Differential Equations (500+ students).	*Spring'21*
Math 224a, Mathematical Methods for the Physical Sciences.	*Fall'20*
Math 54, Linear Algebra and Differential Equations (500+ students).	*Spring'20*
Math 224a, Mathematical Methods for the Physical Sciences.	*Fall'19*
Math 54, Linear Algebra and Differential Equations (500+ students).	*Fall'18*
Math 53, Multivariable Calculus (500+ students).	*Spring'18*
Math 54, Linear Algebra and Differential Equations (400+ students).	*Fall'16*
Math 270, Hot Topics: The Geometry of Polynomials.	*Fall'15*
Math 185, Complex Analysis.	*Fall'15*
Math 121A, Mathematical Tools for the Physical Sciences.	*Spring'15*

Microsoft Research, Bangalore, India. *Jun-Aug '13 & '14*
Mentored Ankit Garg and Naman Agarwal (Princeton) as summer interns.

Princeton University, Princeton, NJ. *Lecturer* *Jan-May'12*
COS 521, Advanced Algorithms, co-taught with Sanjeev Arora.

Yale University, New Haven, CT. *Teaching Fellow*

CPSC 468/568, Complexity Theory.	*Spring '07*
CPSC 201, Introduction to Computer Science.	*Fall '06*

Union College, Schenectady, NY. *Tutor* *Oct '02 - May '05*
Tutored students in mathematics, physics, computer science, and writing.

PAPERS

"Global Convergence of Hessenberg Shifted QR III: Approximate Ritz Values
via Shifted Inverse Iteration." *arxiv:2205.06804*
Jess Banks, Jorge Garza Vargas, and Nikhil Srivastava. Submitted.

"Global Convergence of Hessenberg Shifted QR II: Numerical Stability." *arxiv:2205.06810*
Jess Banks, Jorge Garza Vargas, and Nikhil Srivastava. Submitted.

"Global Convergence of Hessenberg Shifted QR I: Dynamics." *arxiv:2111.07976*
Jess Banks, Jorge Garza Vargas, and Nikhil Srivastava. Submitted.

"On Eigenvalue Gaps of Integer Matrices." *Math. Comp.*
Aaron Abrams, Jamie Pommersheim, Zeph Landau, and Nikhil Srivastava. To appear.

"Bit Complexity of Jordan Normal Form and Spectral Factorization." *Proc. ITCS 2023*
Papri Dey, Ravi Kannan, Nick Ryder, and Nikhil Srivastava.

"Many Nodal Domains in Random Regular Graphs." *Comm. Math. Phys*
Shirshendu Ganguly, Theo McKenzie, Sidhanth Mohanty, and Nikhil Srivastava.

"A Spectral Approach to Polytope Diameter." *Proc. ITCS 2022*
Hariharan Narayanan, Rikhav Shah, and Nikhil Srivastava.

"Support of Closed Walks and Second Eigenvalue Multiplicity of Graphs." *Proc. STOC 2021*
Theo McKenzie, Peter M. R. Rasmussen, and Nikhil Srivastava.

"Scalar Poincaré Implies Matrix Poincaré." *Electron. Comm. Probab.*
Ankit Garg, Tarun Kathuria, and Nikhil Srivastava.

"Overlaps, Eigenvalue Gaps, and Pseudospectrum under Real Ginibre *Ann. Henri Poincare B*

and Absolutely Continuous Perturbations."
Jess Banks, Jorge Garza Vargas, Archit Kulkarni, and Nikhil Srivastava. To appear.

"Pseudospectral Shattering, the Sign Function, and Diagonalization in Nearly Matrix Multiplication Time." *Found. Comp. Math.*
Jess Banks, Jorge Garza Vargas, Archit Kulkarni, and Nikhil Srivastava. Invited to special issue for FOCS 2020.

"High-girth near-Ramanujan Graphs with Localized Eigenvectors." *Israel J. Math*
Noga Alon, Shirshendu Ganguly, and Nikhil Srivastava.

"Gaussian Regularization of the Pseudospectrum and Davies' Conjecture." *Comm. Pure Appl. Math.*
Jess Banks, Archit Kulkarni, Satyaki Mukherjee, and Nikhil Srivastava. To appear.

"On Non-Localization of Eigenvectors of High Girth Graphs." *Int. Math. Res. Not*
Shirshendu Ganguly and Nikhil Srivastava.

"Optimal Lower Bounds for Sketching Graph Cuts." *Proc. SODA 2019*
Charles Carlson, Alexandra Kolla, Nikhil Srivastava, and Luca Trevisan.

" Interlacing Families III: Sharper Restricted Invertibility Estimates." *Israel J. Math*
Adam Marcus, Daniel Spielman, and Nikhil Srivastava. To appear.

"Exponential Lower Bounds on Spectrahedral Representations of Hyperbolicity Cones." *Proc. SODA 2019*
Prasad Raghavendra, Nick Ryder, Nikhil Srivastava, and Benjamin Weitz.

"A Matrix Expander Chernoff Bound." *Proc. STOC 2018*
Yin Tat Lee, Ankit Garg, Zhao Song, and Nikhil Srivastava.

"Asymptotically Optimal Multi-Paving." *Int. Math. Res. Not*
Mohan Ravichandran, Nikhil Srivastava. To appear.

"Group Synchronization on Grids." *Math. Stat. and Learning*
Emmanuel Abbe, Laurent Massoulie, Andrea Montanari, Allan Sly, Nikhil Srivastava.

"The Solution of the Kadison Singer Problem." *Proc. CDM 2016*
Adam Marcus and Nikhil Srivastava. Survey article.

"An Alon-Boppana Type Bound for Weighted Graphs and Lowerbounds for Spectral Sparsification."
Nikhil Srivastava and Luca Trevisan. To appear. *Proc. SODA 2018*

"Localization of Electrical Flows" *Proc. SODA 2018*
Aaron Schild, Satish Rao, Nikhil Srivastava. To appear.

"Aproximating the Largest Root and Applications to Interlacing Families" *Proc. SODA 2018*
Nima Anari, Shayan Oveis-Gharan, and Amin Saberi. To appear.

"Real Stability Testing." *Proc. ITCS 2017*
Prasad Raghavendra, Nick Ryder, Nikhil Srivastava.

"Interlacing Families IV: Bipartite Ramanujan Graphs of Every Size." *Proc. FOCS 2015*
Adam Marcus, Daniel Spielman, and Nikhil Srivastava.

"Finite Free Convolutions of Polynomials." *arxiv:1504.00350*
Adam Marcus, Daniel Spielman, and Nikhil Srivastava.

"Interlacing Families II: Mixed Characteristic Polynomials and the Kadison-Singer Problem." *Ann. Math* **182**

Adam Marcus, Daniel Spielman, and Nikhil Srivastava.

"Interlacing Families I: Bipartite Ramanujan Graphs of All Degrees."   *Ann. Math* **182**
Adam Marcus, Daniel Spielman, and Nikhil Srivastava.
Preliminary version in IEEE FOCS 2013.

"Ramanujan Graphs and the Solution of the Kadison-Singer Problem."   *Proc. ICM 2014*
Adam Marcus, Daniel Spielman, and Nikhil Srivastava.

"Spectral Sparsification of Graphs: Theory and Algorithms."   *Comm. ACM 2013*
Joshua Batson, Daniel Spielman, Nikhil Srivastava, and Shang-Hua Teng.

"A New Approach to Computing Maximum Flows using Electrical Flows."   *Proc. STOC 2013*
Yin Tat Lee, Satish Rao, and Nikhil Srivastava.

"Graph Densification."   *Proc. ITCS 2012*
Moritz Hardt, Nikhil Srivastava, and Madhur Tulsiani.

"Covariance Estimation for Distributions with $2 + \epsilon$ Moments."   *Annals of Probability* **41**
Nikhil Srivastava and Roman Vershynin.

"Zero One Rounding of Singular Vectors."   *Proc. ICALP 2012*
Amit Deshpande, Ravindran Kannan, and Nikhil Srivastava.

"Voting with Rubber Bands, Weights, and String."   *Mathematical Social Sciences* **64**
D. Cervone, R. Dai, D. Gnoutcheff, G. Lanterman,
A. Mackenzie, N. Srivastava, and W. Zwicker.

"On Contact Points of Convex Bodies."   *Geometric Aspects of Functional Analysis*
Nikhil Srivastava.

"An Elementary Proof of the Restricted Invertibility Theorem."   *Israel J. Math* **190**
Daniel Spielman and Nikhil Srivastava.

"Twice-Ramanujan Sparsifiers."   *SIAM J. Comput.* **41**
Joshua Batson, Daniel Spielman, and Nikhil Srivastava.
STOC 2009, chosen for special issue, also appeared in SIAM Review (2014).

"Graph Sparsification by Effective Resistances."   *SIAM J. Comput.* **40**
Daniel Spielman and Nikhil Srivastava. STOC 2008, chosen for special issue.

"Learning and Verifying Graphs Using Queries with a Focus on Edge Counting."   *ALT 2007*
Lev Reyzin and Nikhil Srivastava.

"On the Longest Path Algorithm for Reconstructing Trees from Distance Matrices."   *IPL* **101**
Lev Reyzin and Nikhil Srivastava.

"Tight Bounds on Plurality."   *IPL* **96**
Nikhil Srivastava and Alan Taylor.

INVITED TALKS	**AMS von Neumann Lecture**, Joint Math Meetings, Boston, MA.	*Jan'23*
	Plenary Lecture, International Workshop on Operator Theory (IWOTA), 2022.	*Sep'22*
	Three Lecture Minicourse, Noncommutative Probability Workshop, Kyoto Univeristy.	*Jun'22*
	Operator Algebras Seminar, Kyoto University.	*Apr'22*
	CSDM Seminar, Institute for Advanced Study, Princeton.	*Apr'22*
	Mathematical Physics and Probability Seminar, UC Davis.	*Mar'22*
	Mathematics Colloquium, Delhi University.	*Feb'22*
	Colloquium, ICTS Bangalore.	*Dec'21*
	CS Colloqiuim, Delhi University.	*Dec'21*
	Ramanujan Memorial Lecture, Ramanujan College, Delhi.	*Dec'21*

Operator Algebras and Related Topics, Bogazici University.	*Jun'21*
Bay Area Discrete Math day.	*Apr'21*
E-NLA Seminar.	*Apr'21*
Mathematics seminar, Gujarat University.	*Mar'21*
Mathematics Colloquium, CIMAT, Mexico.	*Mar'21*
Combinatorics Seminar, UC Berkeley.	*Feb'21*
Geometry, Probability, and Computing Seminar, Texas A & M.	*Feb'21*
Algorithms and Complexity Seminar, ETH Zurich.	*Dec'20*
High-Dimensional Probability Workshop, Simons Institute.	*Oct'20*
Stanford Online Combinatorics Seminar.	*May'20*
Online Operator Theory and Related Topics Seminar.	*Apr'20*
Julian Clancy Frazier Lecture, US Naval Academy, MD.	*Feb'20*
Mathematics Colloquium, Aix-Marseille Universite, France.	*Jan'20*
Spectra, Algorithms, & Random Walks on Random Networks, CIRM, France.	*Jan'20*
Geometry of Polynomials Minicourse (3 lectures), MIMUW, Warsaw, Poland.	*Jan'20*
Random Matrices and Related Structures, AMS Sectional, UC Riverside.	*Nov'19*
Combinatorics Seminar, University of Warwick, UK.	*Sep'19*
Beyond Spectral Gaps Conference, Clay Math Institute, Oxford, UK.	*Sep'19*
Applied Math Colloquium, U of Arizona, Tucson, AZ.	*Sep'19*
Eigenfunctions Seminar, IISc, Bangalore, India.	*Aug'19*
2019 Meeting of the International Linear Algebra Society (plenary), Rio, Brazil.	*July'19*
Algorithms & Geometry Annual Conference (plenary), Simons Foundation, NY.	*May'19*
Mathematics Colloquium, UIC, Chicago, IL.	*Apr'19*
Probability Seminar, Princeton University, NJ.	*Mar'19*
Geometric Analysis and Math. Physics Seminar, Uni. Copenhagen, Denmark.	*Dec'18*
Operator Algebras Seminar, Uni. Copenhagen, Denmark.	*Dec'18*
Free Probability Meeting, Oberwolfach, Germany.	*Dec'18*
Complexity Theory Meeting, Oberwolfach, Germany.	*Nov'18*
Real Algebraic Geometry and Optimization, ICERM, Providence, RI.	*Oct'18*
Probability Seminar, UC San Diego, CA.	*Sep'18*
Workshop on Analysis in CS, BIRS, Oaxaca, Mexico.	*Aug'18*
Workshop on Partition Functions (2 talks), EPFL, Lausanne, Switzerland.	*Jul'18*
Theory Seminar, Stanford University, Palo Alto, CA.	*May'18*
Probability Seminar, Stanford University, Palo Alto, CA.	*Mar'18*
Applied Math Colloquium, MIT, Cambridge, MA.	*Feb'18*
Mathematics Colloqium, University of Oregon, Eugene, OR.	*Feb'18*
PACM Colloquium, Princeton University, NJ.	*Feb'18*
CMS Colloquium, Caltech, Pasadena, CA.	*Nov'17*
Random Matrices: Theory and Applications, AMS Sectional, UC Riverside.	*Nov'17*
Extended Probabilistic Operator Algebras Seminar, Berkeley, CA.	*Nov'17*
Geometric Functional Analysis, MSRI, Berkeley, CA. (4 lectures)	*Sep'17*
Stochastic Block Model Workshop, American Institute of Mathematics, San Jose, CA.	*May'17*
CS Seminar, Union College, Schenectady, NY.	*May'17*
Theory Seminar, UC San Diego, CA.	*Feb'17*
Theory Seminar, Microsoft Research, Bangalore, India.	*Jan'17*
Probability Seminar, University of Texas, Austin, TX.	*Dec'16*
Current Developments in Mathematics Conference, Harvard, Cambridge, MA.	*Nov'16*
Theoretical Foundations for Statistical Network Analysis Conf.,Cambridge, UK.	*July'16*
Noncommutative Geometry and Operator Algebras Conf., Bonn, Germany.	*May'16*
Mathematics Colloquium, University of Waterloo, Canada.	*Mar'16*
Harvard/MIT/Microsoft Research Reading Group, Cambridge, MA.	*Feb'16*
Theory Seminar, Microsoft Research, Bangalore, India.	*Jan'16*
Spectral Graph Theory Reunion Workshop, Simons Institute, Berkeley, CA.	*Dec'15*
Algorithms Seminar, Duke University, Durham, NC.	*Nov'15*

Summer Informal Regional Functional Analysis Seminar (SUMIRFAS), Texas A & M.	*Aug'15*
Extended Probabilistic Operator Algebras Seminar, UC Berkeley.	*May'15*
Functional Analysis Seminar, UCLA.	*May'15*
CS Theory Seminar, UCLA.	*Apr'15*
Algorithms and Geometry Collaboration, Simons Foundation, New York, NY.	*Apr'15*
Hot Topics workshop on Kadison-Singer, MSRI, UC Berkeley.	*Mar'15*
Probability Seminar, Statistics Department, Stanford University, Palo Alto, CA.	*Mar'15*
Science Academies' Workshop, Shivaji College, New Delhi. (2 lectures)	*Oct'14*
Stat Math Seminar, Indian Statistical Institute, New Delhi.	*Oct'14*
Colloquium, Department of Mathematics, University of Delhi.	*Oct'14*
Physics Colloquium, ICTS, Tata Institute for Fundamental Research, Bangalore.	*Oct'14*
Probability Seminar, University of California, Berkeley, CA.	*Sep'14*
Algorithmic Spectral Graph Theory Boot Camp, Simons Institute, Berkeley, CA. (3 lectures)	*Aug'14*
International Congress of Mathematicians (analysis section), Seoul, South Korea.	*Aug'14*
SIAM Discrete Math Conference, Minneapolis, MN.	*Jun'14*
Ramanujan's Mathematics and IT Conference, IIIT Bangalore.	*Jun'14*
Mathematics Colloquium, The Institute of Mathematical Sciences, Chennai.	*May'14*
Electrical Flows Workshop, ICERM, Brown University, Providence, RI.	*Apr'14*
Mathematics Colloquium, Indian Institute of Technology, Bombay.	*Mar'14*
CS Seminar, UCLA, Los Angeles, CA.	*Mar'14*
CS Seminar, Stanford University, Palo Alto, CA.	*Mar'14*
Mathematics Colloquium, Stanford University, Palo Alto, CA.	*Mar'14*
Theory Seminar, University of Chicago, IL.	*Dec'13*
Functional Analysis Learning Seminar, University of Michigan, Ann Arbor, MI.	*Dec'13*
Mathematics Colloquium, University of Texas, Austin, TX.	*Nov'13*
Theory Seminar, University of Texas, Austin, TX.	*Nov'13*
Real Analysis Day, Simons Institute, Berkeley, CA.	*Oct'13*
Mathematics Colloquium, University of California, Berkeley, CA.	*Oct'13 & Dec'13*
TCS+ Seminar on Google+.	*Oct'13*
CS Theory Colloquium, University of Washington, Seattle, WA.	*Oct'13*
Theory Seminar, Microsoft Research Redmond, WA. (2 talks)	*Oct'13*
East Coast Operator Algebras Symposium, Cincinnati, OH. (Plenary talk)	*Oct'13*
Theory Seminar, Stanford University, Palo Alto, CA.	*Oct'13*
Theory Seminar, Microsoft Research Silicon Valley, Mountain View, CA.	*Oct'13*
CS Theory Colloquium, University of California, Berkeley, CA.	*Oct'13*
Succinct Data Representations Workshop, Simons Institute, Berkeley, CA.	*Sep'13*
Mathematics Colloquium, Indian Institute of Science, Bangalore, India.	*Aug'13*
Mysore Park Workshop, Infosys, Mysore, India. (2 part tutorial)	*Aug'13*
Banach Spaces: Geometry and Analysis Conference, Jerusalem, Israel.	*May'13*
CS Colloquium, Tata Institute of Fundamental Research, Mumbai, India.	*May'13*
Indo-US Kavli Frontiers of Science Conference, Agra, India.	*Apr'13*
Randomized Numerical Linear Algebra Workshop, FOCS 2012, New Brunswick, NJ.	*Oct'12*
Probability Seminar, Indian Statistical Institute, Bangalore, India.	*Sep'12*
Mysore Park Workshop, Infosys Campus, Mysore, India. (2 part tutorial)	*Aug'12*
Phenomena in High Dimensions Conference, Roscoff, France.	*Jun'12*
Theory Seminar, University of Illinois, Urbana-Champaign, IL.	*Apr '12*
Discrete Math Seminar, Rutgers University, New Brunswick, NJ.	*Apr '12*
Probabilistic Techniques and Algorithms Workshop, University of Texas, Austin.	*Apr '12*
Center for Computational Intractability Meeting, Princeton, NJ.	*Mar '12*
PACM Seminar, Mathematics Department, Princeton University, NJ.	*Feb '12*
Quantitative Geometry in CS Workshop, MSRI, Berkeley, CA. (3 part tutorial)	*Dec '11*
Theory Seminar, University of California, Berkeley, CA.	*Oct '11*
Evans Lecture, University of California, Berkeley, CA.	*Oct '11*
Random Matrices, Functional Analysis, and Algorithms, Oberwolfach, Germany.	*May'11*

Theory Lunch, Carnegie Mellon University, Pittsburgh, PA.	*Mar '11*
Functional Analysis Seminar (2 talks), University of Michigan, Ann Arbor, MI.	*Mar '11*
ARC Seminar, Georgia Tech, Atlanta, GA.	*Feb '11*
Theory Group Seminar, Microsoft Research, Redmond, WA.	*Jan'10 & Feb'11*
DIMACS Light Seminar, Rutgers University, New Brunswick, NJ.	*Feb '11*
Members Seminar, Institute for Advanced Study, Princeton, NJ.	*Nov '10 & Apr '11*
Theory Seminar, Courant Institute, New York University, NY.	*Oct '10*
CSE Seminar, Indian Institute of Technology, Kanpur, India.	*Sep '10*
ICM Satellite Conf. on Algebraic/Probabilistic Aspects of Computing, Bangalore, India.	*Sep '10*
Microsoft Research, Bangalore, India.	*Jul '10*
Theory Group Seminar, Microsoft Research, Redmond, WA.	*Jan '10*
Algorithms and Complexity Seminar, MIT, Cambridge, MA.	*Oct '09*
IP for Lunch, IBM TJ Watson Research Center, Yorktown Heights, NY.	*Oct '09*
CS/Discrete Math Seminar, Institute for Advanced Study, Princeton, NJ.	*Sept '09*
Theory Seminar, Courant Institute, New York University, NY.	*Oct '08*
CSA Seminar, Indian Institute of Science, Bangalore, India.	*Aug '08*
MMDS 2008, Stanford University, CA.	*Jun '08*
SIAM Conference on Discrete Mathematics, Burlington, VT.	*Jun '08*
Theory Lunch, Princeton University, NJ.	*Apr '08*

SERVICE

Member of the Executive Committee of the College of L &S, UC Berkeley, 2022-present.

Member of Simons Institute Scientific Advisory Board, 2020-present.

Co-organizer of Banff workshop on "Perspectives on Matrix Computations: Theoretical Computer Science Meets Numerical Analysis", March 2023.

Co-chair of semester long Simons Institute Program on "Geometry of Polynomials" in Spring 2019.

Co-organizer of IPAM quarter on "Quantitative Linear Algebra" in Spring 2018.

Co-organizer of Banff workshop on "Algebraic and Spectral Graph Theory", August, 2016.

Co-organizer of MSRI Hot Topics Workshop on 'Kadison-Singer, Interlacing Polynomials, and Beyond,' March, 2015.

Organizer of Minisymposium on 'Combinatorics of Hyperbolic and Real Stable Polynomials' at SIAM DM 2014.

Co-organizer of FOCS 2013 workshop on 'Zeros of Polynomials and Their Applications.'

Program Committee member: FSTTCS 2012, STOC 2015, ICALP 2016, ITCS 2017, FSTTCS 2017, FOCS 2018, STOC 2019, ITCS 2021, ITCS 2023.

Reviewer for SODA, STOC, FOCS, JACM, ITCS, ESA, TOCS, Algorithmica, Random Stuct. and Alg., SICOMP, Adv. Math., Israel J. Math., IMRN, J. Functional Analysis, Annals of Math, Journal of the AMS, Invent. Math, Proc. AMS, Duke Math J..