Daniel L. Sussman

http://math.bu.edu/people/sussman/

665 Commonwealth Avenue
Mathematics and Statistics Department, Floor 6
Boston, MA 02215

Education

2014	Ph.D. Applied Math and Statistics Johns Hopkins University Thesis: Foundations of Adjacency Spectral Embeddings Advisor: Carey E. Priebe
2008	B.A. *magna cum laude*, Mathematics Cornell University

Positions

2021–Present	Associate Director for the Program in Statistics Department of Mathematics and Statistics, Boston University
2016–Present	Assistant Professor Department of Mathematics and Statistics, Boston University
2014–2016	Postdoctoral Researcher Airoldi Lab, Statistics Department, Harvard University
2014 Spring	Postdoctoral Researcher and Lecturer Applied Math and Statistics Department, Johns Hopkins University

Publications

Manuscripts

[1] Zhirui Li, Ben Johnson, D Sussman, C Priebe, and V Lyzinski (Aug. 2023). "Gotta match 'em all: Solution diversification in graph matching matched filters". In: *IEEE transactions on signal and information processing over networks* 10, pp. 752–764. DOI: 10.1109/TSIPN.2024.3467921. arXiv: 2308.13451 [stat.ML]

[2] Wenrui Li, Daniel L. Sussman, and Eric D. Kolaczyk (2023). "Estimation of the Branching Factor in Noisy Networks". In: *IEEE Transactions on Network Science and Engineering* 10.1, pp. 565–577. DOI: 10.1109/TNSE.2022.3217463. arXiv: 2002.05763 [stat.ME]

[3] Christy Lin, Daniel L. Sussman, and Prakash Ishwar (2023). "Ergodic Limits, Relaxations, and Geometric Properties of Random Walk Node Embeddings". In: *IEEE Transactions on Network Science and Engineering* 10.1, pp. 346–359. DOI: 10.1109/TNSE.2022.3208520. arXiv: 2109.04526 [stat.ML]

[4] Kelly Kung and Daniel L Sussman (Sept. 2022). "Unbiased estimation for additive exposure models". In: arXiv: 2209.01053 [stat.ME]

[5] Qian Wang and Daniel Sussman (Sept. 2022). "Shuffled total least squares". In: arXiv: 2209.01066 [math.ST]

[6] Konstantinos Pantazis, Daniel L Sussman, Youngser Park, Zhirui Li, Carey E Priebe, and Vince Lyzinski (May 2022). "Multiplex graph matching matched filters". In: *Applied Network Science* 7.1, pp. 1–35. DOI: 10.1007/s41109-022-00464-0. arXiv: 1908.02572 [cs.SI]

[7] Zihuan Qiao and Daniel Sussman (Dec. 2021a). "iGraphMatch: an R Package for the Analysis of Graph Matching". In: arXiv: 2112.09212 [stat.CO]

[8] Wenrui Li, Daniel L Sussman, and Eric D Kolaczyk (May 2021). "Causal Inference under Network Interference with Noise". In: arXiv: 2105.04518 [stat.ME]

[9] Jesús Arroyo, Daniel L Sussman, Carey E Priebe, and Vince Lyzinski (Jan. 2021). "Maximum likelihood estimation and graph matching in errorfully observed networks". In: *Journal of computational and graphical statistics*, pp. 1–33. DOI: 10.1080/10618600.2021.1872582. arXiv: 1812.10519 [stat.ML]

[10] Vince Lyzinski and Daniel L Sussman (Dec. 2020). "Matchability of heterogeneous networks pairs". In: *Information and inference* 9.4, pp. 749–783. DOI: 10.1093/imaiai/iaz031. arXiv: 1705.02294 [math.ST]

[11] Daniel L Sussman, Youngser Park, Carey E Priebe, and Vince Lyzinski (Nov. 2020). "Matched Filters for Noisy Induced Subgraph Detection". In: *IEEE transactions on pattern analysis and machine intelligence* 42.11, pp. 2887–2900. DOI: 10.1109/TPAMI.2019.2914651. arXiv: 1803.02423 [stat.ML]

[12] Benjamin Draves and Daniel L Sussman (May 2020). "Bias-Variance Tradeoffs in Joint Spectral Embeddings". In: arXiv: 2005.02511 [math.ST]

[13] Runze Tang, Michael Ketcha, Alexandra Badea, Evan D Calabrese, Daniel S Margulies, Joshua T Vogelstein, Carey E Priebe, and Daniel L Sussman (June 2019). "Connectome Smoothing via Low-Rank Approximations". In: *IEEE transactions on medical imaging* 38.6, pp. 1446–1456. DOI: 10.1109/TMI.2018.2885968. arXiv: 1609.01672 [stat.ME]

[14] Avanti Athreya, Donniell E Fishkind, Minh Tang, Carey E Priebe, Youngser Park, Joshua T Vogelstein, Keith Levin, Vince Lyzinski, Yichen Qin, and Daniel L Sussman (Aug. 2018). "Statistical Inference on Random Dot Product Graphs: a Survey". In: *Journal of machine learning research: JMLR* 18.226, pp. 1–92. DOI: 10.1007/s00180-019-00913-y. arXiv: 1709.05454 [stat.ME]

[15] Fei Fang, Daniel L Sussman, and Vince Lyzinski (July 2018). "Tractable Graph Matching via Soft Seeding". In: arXiv: 1807.09299 [stat.CO]

[16] John Bliton, Daniel Sussman, Ronald M Summers, and Jianhua Yao (Nov. 2017). "Adipose tissue measurement using magnetic resonance imaging: A survey". In: *Current medical imaging reviews* 13.4, pp. 1–19. DOI: 10.2174/1573405612666170710163051

[17] Minh Tang, Avanti Athreya, Daniel L Sussman, Vince Lyzinski, and Carey E Priebe (Aug. 2017). "A nonparametric two-sample hypothesis testing problem for random graphs". In: *Bernoulli* 23.3, pp. 1599–1630. DOI: 10.3150/15-BEJ789. arXiv: 1409.2344 [math.ST]

[18] Minh Tang, Avanti Athreya, Daniel L Sussman, Vince Lyzinski, Youngser Park, and Carey E Priebe (Apr. 2017). "A Semiparametric Two-Sample Hypothesis Testing Problem for Random Graphs". In: *Journal of computational and graphical statistics* 26.2, pp. 344–354. DOI: 10.1080/10618600.2016.1193505. arXiv: 1403.7249 [stat.ME]

[19] Daniel L Sussman and Edoardo M Airoldi (Feb. 2017). "Elements of estimation theory for causal effects in the presence of network interference". In: arXiv: 1702.03578 [stat.ME]

[20] A Athreya, C E Priebe, M Tang, V Lyzinski, D J Marchette, and D L Sussman (Feb. 2016). "A Limit Theorem for Scaled Eigenvectors of Random Dot Product Graphs". In: *Sankhya A* 78.1, pp. 1–18. DOI: 10.1007/s13171-015-0071-x. arXiv: 1305.7388 [math.ST]

[21] Shakira Suwan, Dominic S Lee, Runze Tang, Daniel L Sussman, Minh Tang, and Carey E Priebe (Jan. 2016). "Empirical Bayes estimation for the stochastic blockmodel". In: *Electronic journal of statistics* 10.1, pp. 761–782. DOI: 10.1214/16-EJS1115. arXiv: 1405.6070 [stat.ME]

[22] Carey E Priebe, Daniel L Sussman, Minh Tang, and Joshua T Vogelstein (Oct. 2015). "Statistical Inference on Errorfully Observed Graphs". In: *Journal of computational and graphical statistics* 24.4, pp. 930–953. DOI: 10.1080/10618600.2014.951049. arXiv: 1211.3601 [stat.ML]

[23] Vince Lyzinski, Daniel L Sussman, Donniell E Fishkind, Henry Pao, Li Chen, Joshua T Vogelstein, Youngser Park, and Carey E Priebe (Aug. 2015). "Spectral clustering for divide-and-conquer graph matching". In: *Parallel computing* 47, pp. 70–87. DOI: 10.1016/j.parco.2015.03.004. arXiv: 1310.1297 [stat.ML]

[24] Daniel L Sussman, Alexander Volfovsky, and Edoardo M Airoldi (June 2015). "Analyzing statistical and computational tradeoffs of estimation procedures". In: arXiv: 1506.07925 [stat.CO]

[25] Narayanan Kasthuri et al. (July 2015). "Saturated Reconstruction of a Volume of Neocortex". In: *Cell* 162.3, pp. 648–661. DOI: 10.1016/j.cell.2015.06.054

[26] Vince Lyzinski, Daniel L Sussman, Minh Tang, Avanti Athreya, and Carey E Priebe (Jan. 2014). "Perfect clustering for stochastic blockmodel graphs via adjacency spectral embedding". In: *Electronic journal of statistics* 8.2, pp. 2905–2922. DOI: 10.1214/14-EJS978. arXiv: 1310.0532 [stat.ML]

[27] Daniel L Sussman, Minh Tang, and Carey E Priebe (Jan. 2014). "Consistent latent position estimation and vertex classification for random dot product graphs". In: *IEEE transactions on pattern analysis and machine intelligence* 36.1, pp. 48–57. DOI: 10.1109/TPAMI.2013.135. arXiv: 1207.6745 [stat.ML]

[28] Minh Tang, Daniel L Sussman, and Carey E Priebe (June 2013). "Universally consistent vertex classification for latent positions graphs". In: *Annals of statistics* 41.3, pp. 1406–1430. DOI: 10.1214/13-AOS1112. arXiv: 1212.1182 [stat.ML]

[29] Donniell E Fishkind, Daniel L Sussman, Minh Tang, Joshua T Vogelstein, and Carey E Priebe (Jan. 2013). "Consistent Adjacency-Spectral Partitioning for the Stochastic Block Model When the Model Parameters Are Unknown". In: *SIAM Journal on Matrix Analysis and Applications* 34.1, pp. 23–39. DOI: 10.1137/120875600. arXiv: 1205.0309 [stat.ME]

[30] Daniel L Sussman, Minh Tang, Donniell E Fishkind, and Carey E Priebe (Sept. 2012). "A Consistent Adjacency Spectral Embedding for Stochastic Blockmodel Graphs". In: *Journal of the American Statistical Association* 107.499, pp. 1119–1128. DOI: 10.1080/01621459.2012.699795. arXiv: 1108.2228 [stat.ML]

[31] Ronald M Summers, Jiamin Liu, Daniel L Sussman, Andrew J Dwyer, Bhavya Rehani, Perry J Pickhardt, J Richard Choi, and Jianhua Yao (July 2012). "Association between visceral adiposity and colorectal polyps on CT colonography". In: *AJR. American journal of roentgenology* 199.1, pp. 48–57. DOI: 10.2214/AJR.11.7842

Thesis

[1] Daniel Lewis Sussman (Jan. 2014). "Foundations of adjacency spectral embedding". PhD thesis. Johns Hopkins University

Book Chapters

[1] Eric W Bridgeford, Daniel Sussman, Vince Lyzinski, Yichen Qin, Youngser Park, and Brian Caffo (2018). "What Is Connectome Coding?" In: *SHORT COURSE 2: Functional, Structural, and Molecular Imaging, and Big Data Analysis*. Ed. by Ed Boyden and Kwanghun Chung. Society for Neuroscience, p. 62

[2] Li Chen, Douglas C Comer, Carey E Priebe, Daniel Sussman, and James C Tilton (2013). "Refinement of a Method for Identifying Probable Archaeological Sites from Remotely Sensed Data". In: *Mapping*

Archaeological Landscapes from Space. Ed. by Douglas C Comer and Michael J Harrower. SpringerBriefs in Archaeology. New York, NY: Springer New York, pp. 251–258. DOI: 10.1007/978-1-4614-6074-9_21

Conference Proceedings

[1] K Pantazis, D L Sussman, Y Park, C E Priebe, and V Lyzinski (Dec. 2019). "Multiplex graph matching matched filters". In: *2019 IEEE International Conference on Big Data (Big Data)*, pp. 4921–4927. DOI: 10.1109/BigData47090.2019.9006566

[2] L Li and D L Sussman (Dec. 2019). "Graph Matching via Multi-Scale Heat Diffusion". In: *2019 IEEE International Conference on Big Data (Big Data)*. ieeexplore.ieee.org, pp. 1157–1162. DOI: 10.1109/BigData47090.2019.9005526

[3] Daniel L Sussman, Vince Lyzinski, Youngser Park, and Carey E Priebe (Feb. 2018). "Matched Filters for Noisy Induced Subgraph Detection". In: *GTA3 2018: Workshop on Graph Techniques for Adversarial Activity Analytics at WSDM*. Won *Best Paper Award* for workshop.

[4] Joel Douglas, Ben Zimmerman, Alexei Kopylov, Jiejun Xu, Daniel Sussman, and Vince Lyzinski (Feb. 2018). "Metrics for Evaluating Network Alignment". In: *GTA3 2018: Workshop on Graph Techniques for Adversarial Activity Analytics at WSDM*. hrl.com

[5] D Mhembere, W Gray Roncal, D Sussman, C E Priebe, R Jung, S Ryman, R J Vogelstein, J T Vogelstein, and R Burns (Dec. 2013). "Computing scalable multivariate glocal invariants of large (brain-) graphs". In: *2013 IEEE Global Conference on Signal and Information Processing*, pp. 297–300. DOI: 10.1109/GlobalSIP.2013.6736874

[6] D L Sussman, D Mhembere, S Ryman, R Jung, et al. (2013). "Massive Diffusion MRI Graph Structure Preserves Spatial Information". In: Citeseer. DOI: 10.1.1.639.139

[7] James C Tilton, Douglas C Comer, Carey E Priebe, Daniel Sussman, and Li Chen (2012). "Refinement of a method for identifying probable archaeological sites from remotely sensed data". In: *Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery XVIII*. DOI: 10.1117/12.918366

[8] Jianhua Yao, Daniel L Sussman, and Ronald M Summers (2011). "Fully automated adipose tissue measurement on abdominal CT". in: *SPIE Medical Imaging. Orlando, Florida: SPIE*, 79651Z. DOI: https://doi.org/10.1.1.639.139

[9] Daniel L Sussman, Jianhua Yao, and Ronald M Summers (Mar. 2010b). "Automated fat measurement and segmentation with intensity inhomogeneity correction". In: *Medical Imaging 2010: Image Processing*. Vol. 7623. International Society for Optics and Photonics, p. 76233X. DOI: 10.1117/12.843860

[10] D L Sussman, J Yao, and R M Summers (Apr. 2010a). "Automated measurement and segmentation of abdominal adipose tissue in MRI". in: *2010 IEEE International Symposium on Biomedical Imaging: From Nano to Macro*, pp. 936–939. DOI: 10.1109/ISBI.2010.5490141

Software

[1] Zihuan Qiao and Daniel L Sussman (Jan. 2021b). *iGraphMatch*

Invited Presentations

[1] "Bias-Variance Tradeoffs in Joint Spectral Embeddings", PennSIVE Seminar Series, University of Pennsylvania, April 2023.

[2] "Matching Embeddings via Shuffled Total Least Squares Regression", New England Statistics Symposium, University of Connecticut, May 2022.

[3] "Heterogeneous Non-identical Graph Matching ", New England Statistics Symposium, University of Rhode Island, October 2021.

[4] "Bias-Variance Tradeoffs in Joint Spectral Embeddings", Online Stochastics Seminar, Georgia Tech, October 2020.

[5] "Bias-Variance Tradeoffs in Joint Spectral Embeddings", IMA Workshop on Theory and Algorithms of Graph-based Learning, September 2020.

[6] "The Role of Additivity in Causal Inference Under Interference", Joint Statistics Meetings, Invited Session on *The future of designed experiments in the age of Big Data*, Baltimore, MD, July 2020.

[7] "Graph Matching via Multi-Scale Heat Diffusion", IEEE International Conference on Big Data, Los Angeles, CA, December 2019.

[8] "Multiple Network Inference: From Joint Embeddings to Graph Matching", Mathematics Seminar, University of Massachusetts Boston, Boston, MA, November 2019.

[9] "Multiple Network Inference: From Joint Embeddings to Graph Matching", Applied Statistics Symposium, International Chinese Statistical Association, Raleigh, NC, June 2019.

[10] "Finding the Way for Graph Matching", Graph Exploitation Symposium, MIT Lincoln Laboratories, Newton, MA, April 2019.

[11] "Multiple Network Inference: From Joint Embeddings to Graph Matching", Data Science Seminar Seminar, University of Tennessee Knoxville, February 2019.

[12] "Multiple Network Inference: From Joint Embeddings to Graph Matching", Applied Mathematics Seminar, Tufts University, January 2019.

[13] "Multiple Graph Inference: From Joint Embeddings to Graph Matching," Statistics Seminar, Temple University, October 2018.

[14] "Decision Theoretic Aspects of Causal Inference Under Network Interference," JSM. July 2018.

[15] "Decision Theoretic Aspects of Causal Inference Under Network Interference," ISBA. June 2018.

[16] "Multiple Graph Inference: From Omnibus Embeddings to Graph Matching," Machine Learning Seminar, University of Bristol. June 2018.

[17] "Decision Theoretic Aspects of Causal Inference Under Network Interference," NetSci. June 2018.

[18] "Multiple Graph Inference: From Omnibus Embeddings to Graph Matching," Statistics Seminar, UMass Amherst. February 2018.

[19] "Matched Filters for Noisy Induced Subgraph Detection," Workshop on Graph Techniques for Adversarial Activity Analytics, 11th ACM International Conference on Web Search and Data Mining. Long Beach, CA, February 2018

[20] "Multiple Graph Inference: From Omnibus Embeddings to Graph Matching," Math IRL Seminar, Boston, MA, December 2017.

[21] "Multiple Graph Inference: From Omnibus Embeddings to Graph Matching," Random Matrix & Probability Theory Seminar, Harvard University, Center of Mathematical Sciences and Applications, Cambridge, MA, November 2017.

[22] "Multiple Graph Inference: From Omnibus Embeddings to Graph Matching," Statistics Seminar, University of Connecticut, Storrs, CT, November 2017.

[23] "Multiple Graph Inference: From Omnibus Embeddings to Graph Matching," Wed@Hariri/Meet Our Fellows Talk, Rafik B. Hariri Institute for Computing and Computational Science & Engineering, Boston University, Boston, MA, November 2017.

[24] "Unbiased estimation under network interference", Joint Statistics Meetings, Invited Session on *Experiments and Inference for Social Networks*, Baltimore, MD, July 2017.

[25] "Graph matching the matchable nodes when some nodes are unmatchable", SIAM Network Science Workshop, Pittsburgh, PA, July 2017.

[26] "Unbiased Estimation of Causal Effects under Network Interference", New England Statistics Symposium, Storrs, CT, May 2017.

[27] "Optimal Unbiased Estimation of Causal Effects under Network Interference", NetSciX, Tel Aviv, Israel, January 2017.

[28] "Statistical Inference for Networks via Spectral Embedding", Yale Biostatistics Seminar, New Haven, CT, October 2016.

[29] "Unbiased Estimation of Causal Effects under Network Interference ", International Indian Statistical Association Conference on Statistics, Session on *New directions in network analysis*, Corvalis, OR, August 2016.

[30] "Estimating the Population Mean Network from a Random Sample of Networks", Joint Statistics Meetings, Invited Session on *Advances and Novel Problems in Network Statistics*, Chicago, IL, July 2016.

[31] "Unbiased Estimation of Causal Effects under Network Interference ", Conference on Statistical Learning and Data Science, Session on *Network Inference*, Chapel Hill, NC, June 2016.

[32] "Unbiased Estimation of Causal Effects under Network Interference ", NetSci 2016 Satellite Symposium on *Statistical Inference for Network Models*, Seoul, South Korea, May 2016.

[33] "Statistical Inference for Networks via Adjacency Spectral Embedding", Duke Network Analysis Center, Duke University, September 2015.

[34] "Statistical Inference for Networks via Adjacency Spectral Embedding", ISNPS Meeting on *Biosciences, Medicine, and novel Non-Parametric Methods*. Graz, Austria, July 2015.

[35] "Challenges in (Spectral) Network Denoising", SIAM Conference on Computational Science and Engineering, Salt Lake City, March 2015.

[36] "Computational and Statistical Trade-offs: Towards a Mathematical Framework", Workshop on *Mathematics of Data Analysis in Cybersecurity*, ICERM, Brown University, October 2014.

[37] "Adjacency Spectral Embedding for Random Graphs", Temple University Statistics Department Seminar, Fox School of Business, Temple University, September 2014

[38] "Testing for Commonality Among Graphs and Subgraphs", Topic Contributed Talk in *Estimation and Testing for Models of Network Data*, Joint Statistics Meeting, Boston, August 2014, [Online]

[39] 'Consistent Vertex Classification with Applications in Massive MR Brain-Graphs", Norbert Wiener Center Seminar, University of Maryland, March 2013.

[40] "Consistent Vertex Classification with Applications in Massive MR Brain-Graphs", Duke Data Seminar, Duke University, January 2013.

[41] "Estimating Latent Positions and Vertex Classification for Random Dot Product Graphs", Invited Talk in *Stochastic Blockmodels: New Uses and Directions*, Joint Statistical Meetings, 2012. [Online]

[42] "Statistical Enhancement of Archaeological Site Discovery Protocols via Multi-spectral Imagery." NASA ROSES Space Archaeology Workshop on Research and World Heritage, Johns Hopkins University, October 2011.

Posters

[1] "Unbiased Estimation of Causal Effects under Network Interference", IMS New Researchers Conference, Madison, WI, July 2016.

[2] A. Volfvovsky, D. L. Sussman, E. Airoldi, "Computational and Statistical Trade-offs: Towards a Mathematical Framework", SIAM Conference on Computational Science and Engineering, March 2015.

[3] D. L. Sussman. "Wavelets for Space Archaeology" February Fourier Talks, February 2013.

[4] J. T. Vogelstein, D. E. Fishkind, D. L. Sussman and C. E. Priebe. "Large Graph Classification: Theory and Statistical Connectomics Applications." IMA Large Graphs: Modeling, Algorithms and Applications, October 2011.

[5] D. E. Fishkind , D. L. Sussman, M. Tang, J. T. Vogelstein and C. E. Priebe. "Dot Product Embedding in Large (Errorfully Observed) Graphs with Applications in Statistical Connectomics." IMA Large Graphs: Modeling, Algorithms and Applications, October 2011.

Funding

2020-2023	DARPA, "Algorithmic Primitives for Aligning and Merging Complex Network," PI. Prime: University of Maryland
2017-2019	ASD R&E, "Statistical Modeling and Analysis of Graph Data and Graph Matching," PI. Prime: MIT Lincoln Labs
2017-2019	DARPA, "Universally Useful Primitives for Aligning Networks Across Time and Space," PI. Prime: University of Massachusetts, Amherst

Awards and Honors

2022	Designing Anti-racist Curriculum Fellowship
2018	Best Paper Award Workshop on Graph Techniques for Adversarial Activity Analytics at WSDM
2017	Rafik B. Hariri Institute for Computing Junior Faculty Fellow
2013–2015	Whiting School of Engineering Centennial Fellowship
2012, 2013	Acheson J. Duncan Fund for the Advancement of Research in Statistics Travel Award
2012	National Science Foundation Graduate Research Fellowship Program Honorable Mention
2011–2015	Charles and Catherine Counselman Endowed Fellowship
2010–2015	Newman Family Fellowship

Ph.D. Advising

Shiwen Yang	Currently 5th year Ph.d. Student
Zihuan Qiao	Ph.D. defended June 2022 Dissertation: Graph matching with applications to network analysis
Kelly Kung	Ph.D. defended June 2022

	Dissertation: Estimation of Causal Effects of Exposure Models and of Drug-Induced Homicide Prosecutions on Drug Overdose Deaths (jointly advised with Judith Lok)
Qian Wang	Ph.D. defended May 2022 Dissertation: Permutation Recovery in Shuffled Total Least Squares Regression
Ben Draves	Ph.D. defended February 2022 Dissertation: Joint Spectral Embeddings of Random Dot Product Graphs
Christy Lin	Ph.D. defended August 2021 Dissertation: Unsupervised Random Walk Node Embeddings for Network Block Structure Representation (jointly advised with Prakash Ishwar)
Wenrui Li	Ph.D. defended April 2021 Dissertation: Uncertainty quantification in noisy networks (jointly advised with Eric Kolaczyk)

Teaching

Boston University

Assistant Professor

2025 Spring	MA 415/615: Data Science with R
2024 Fall	MA 415/615: Data Science with R
	MA 581: Probability
2024 Spring	MA 415/615: Data Science with R
	MA 213: Introduction to Probability and Statistics
2023 Fall	MA 415/615: Data Science with R
2022 Fall	MA 415/615: Data Science with R
	MA 581 Probability
2021 Spring	MA 415/615: Data Science with R
2021 Fall	MA 415/615: Data Science with R
	MA 681: Accelerated Introduction to Statistical Methods for Quantitative Research
2021 Spring	MA 415/615: Data Science with R
2020 Fall	MA 415/615: Data Science with R
	MA 681: Accelerated Introduction to Statistical Methods for Quantitative Research
2020 Spring	MA 415/615: Data Science with R
	MA 581: Probability
2019 Fall	MA 415/615: Data Science with R
2018 Fall	MA 681: Accelerated Introduction to Statistical Methods for Quantitative Research
2018 Spring	MA 703: Statistical Analysis of Networks
2017 Fall	MA 681: Accelerated Introduction to Statistical Methods for Quantitative Research
2017 Spring	MA 882: Statistics Seminar on Network Modeling and Inference
2016 Fall	MA 681: Accelerated Introduction to Statistical Methods for Quantitative Research

Johns Hopkins University

Lecturer

2014 Spring	Probability and Statistics for Biological Sciences and Engineering

Teaching Assistant

2013 Fall	Graduate Probability Theory
2013 Spring	Probability and Statistics for the Life Sciences
2012 Fall	Introductory Statistics through Case Study
2012 Fall	Introductory Statistics

Instructor

2013 Summer	Financial Math Masters Student Orientation

2012 Summer Financial Math Masters Student Orientation
Three 90-minute lectures on undergraduate statistics and `R`*.*

Weill Cornell Medical College in Qatar

Academic Assistant
2008 Fall Introductory Calculus

Experience and Service

2023	Conference Organizer New England Statistics Symposium
2023	Committee Member BU MA Statistics Postdoctoral Associate Lecturer Search Committee
2022	Committee Member BU MA Statistics Tenure Track Professor Search Committee
2022	Session Organizer New England Statistics Symposium Invited Session on "Statistical Inference for and with Network Data"
2021	Committee Member BU MA Full-time Lecturer Search Committee
2020	Committee Member BU MA Neuro-stats Tenure Track Professor Search Committee
2018	Session organizer at Joint Statistics Meetings Invited Session "Recent Advances in Multiple Graph Inference"
2018	Satellite co-organizer NetSci Satellite Workshop on "Network Causal Inference and Design of Experiments"
2017-2021	Co-organizer BU MA Probability and Statistics Seminar Committee
2017-Present	Committee Member BU MA Graduate Committee
2018	Session organizer Joint Statistics Meetings Invited Session "Experiments and Inference for Social Networks"
2014-Present	Committee Member *Junior IMS Committee for Young Researchers*
July 2015	Session Organizer and Chair *Organized a session with Vince Lyzinski on "Statistical Inference for High-Dimensional Data" at ISNPS Meeting on Biosciences, Medicine, and novel Non-Parametric Methods.*
2012–2013	Student Seminar Co-chair, Applied Math and Statistics, Johns Hopkins University *Recruited students to speak and organized a weekly student seminar series.*
July 2012	Summer School Fellow Summer School on Geometry and Data
June 2012	Course Developer, Applied Math and Statistics, Johns Hopkins University *Helped develop a new introductory statistics course based on case studies.*
2011–2012	Statistical Consultant

	Cultural Site Research Management *Trained classifiers to detect archaeological sites from satellite images with Carey Priebe and Douglas Comer.*
2009–2010	Intramural Research Training Award Fellow Summers Lab, National Institutes of Health *Developed clinical software and algorithms to automatically segment adipose tissue in abdominal MR and CT scans with Dr. Jianhua Yao.*
2007–2008	Undergraduate Research Assistant Siepel Lab, Biostatistics and Computational Biology Department, Cornell University *Investigated an 18-way mammalian whole genome alignment in an independent project to determine the percentage of the genome under selective pressure.*

Professional Memberships

2016–Present	Institute for Mathematical Statistics
2013–Present	American Statistical Association
2014–Present	Society for Industrial and Applied Mathematics