

Jian (Frank) Zou, PhD
University of Central Florida College of Nursing
12201 Research Parkway
Orlando, FL 32826
Jian.zou@ucf.edu

EDUCATION

Year	Degree	Institution	Location
2009	Ph.D., Statistics	University of Connecticut	Storrs, CT
2005	M.S., Mathematics	University of Connecticut	Storrs, CT
2002	M.S., Computer Science	Shandong University	Jinan, China
2000	B.S., Mathematics	Shandong University	Jinan, China

EMPLOYMENT

ACADEMIC APPOINTMENTS

Years	Position	Institution	Location
2025-Present	Associate Professor of Statistics	University of Central Florida, College of Nursing	Orlando, FL
2014-2025	Assistant, Associate Professor of Statistics and Data Science	Worcester Polytechnic Institute, Department of Mathematical Sciences	Worcester, MA
2014-2025	Affiliated Core Faculty, Data Science Program & Bioinformatics and Computational Biology Program	Worcester Polytechnic Institute	Worcester, MA
2025-2026	Affiliated Faculty, Department of Mathematical Sciences & Data Science Program	Worcester Polytechnic Institute	Worcester, MA
2022-2024	Associate Department Head	Worcester Polytechnic Institute, Department of Mathematical Sciences	Worcester, MA
2019-2024	Associate Director	Worcester Polytechnic Institute, Center for Industrial Mathematics & Statistics	Worcester, MA
2014-Present	Member	Worcester Polytechnic Institute, Center for Industrial Mathematics & Statistics	Worcester, MA
2011-2014	Assistant Professor	Indiana University-Purdue University Indianapolis, Department of Mathematical Sciences	Indianapolis, IN
2009-2011	Postdoctoral Fellow	National Institute of Statistical Sciences and Duke University	RTP, NC

AWARDS AND HONORS

Date	Award	Organization/Group
2016	NSF Travel Award, SAMSI Games and Decisions in Reliability and Risk Workshop	National Science Foundation
2015	NSF Travel Award, Fifth International IMS-FIPS Workshop	National Science Foundation
2012	NSF Travel Award, 14th Meeting of New Researchers in Statistics and Probability	National Science Foundation

Date	Award	Organization/Group
2012	NSF Travel Award, Uncertainty Quantification for High-Performance Computing Workshop	National Science Foundation
2009	Travel Award, NISS/ASA Writing Workshop for Junior Researchers	National Institute of Statistical Sciences/American Statistical Association
2009	NSF Travel Award, Conference on Modeling High Frequency Data in Finance	National Science Foundation
2009	IBM T.J.Watson Student Research Paper Award, New England Statistics Symposium	International Business Machines Corporation
2005	Graduate Pre-doctoral Fellowship, University of Connecticut	University of Connecticut

RESEARCH AND SCHOLARSHIP

PUBLICATIONS *data-based; ^ student co-author[s]; underlined text is hyperlinked

Google Scholar h-index=12; i10-index=13

PEER-REVIEWED JOURNAL ARTICLES

1. *^Wang, Y., ^Jayaweera, N., and Zou, J. (2026). BOST-LAWS: A Bayesian Online SpatioTemporal Detection Framework using Likelihood Adjusted Weighting Smoothing for Disease Surveillance. *Statistical Analysis and Data Mining*. In press.
2. *Malatyali, A., Cidav, T., Wiese, L. A. K., Zou, J., Brown, M. J., Ma, J., Diniz, B. S., & Thiamwong, L. (2026). Rural–Urban Differences in Cognitive Outcomes Among Older Adults: The Roles of Falls and Depressive Symptoms. *Journal of Dementia and Alzheimer's Disease*, 3(1), 13.
<https://doi.org/10.3390/jdad3010013>
3. Malatyali A., Cidav T., Zou, J., Thiamwong L., Diniz, B. (2026+). Physical activity and proinflammatory cytokines in falls among older Americans. Submitted.
4. ^Yan, K., Zou, J., Loerzel, V. (2026+). Central Position of Anxiety-Related Distress in a Quality-of-Life Network Among Older Adults on Chemotherapy. Submitted.
5. ^Yan, K., Zou, J., Loerzel, V. (2026+). Age-Stratified Patterns in Onset and Progression of High Worry During Chemotherapy. Submitted.
6. ^Salargarna, F., Murawsky, J., Si, B., Frechette, J., Ross, E., Allen, C., ^Gao, G., Wang, F., Zou, J., Yoganathan, A.P., Wei, Z.A., Fogel, M.A. (2026+). "Hemodynamic Factors from CFD and MRI for Adverse Events of Fontan Patients," submitted.
7. ^Yu, E., ^Cao, G., Khalil, Y.F., Zou, J., De Alwis. (2026). Enhancing FRACAS Through Natural Language Processing: An AI-Driven Approach to System Reliability Analysis. *Journal of Research in Engineering and Computer Sciences*.4(4), 25-47. DOI: <https://doi.org/10.63002/jrecs.404.1603>
8. ^Brody, E., ^Hyder, M., Khalil, Y.F., Zou, J., De Alwis, T.P. (2026+). An AI-Driven Combinatorial Approach to Failure Analysis of Engineering Systems. Submitted.
9. *^Wang, Y., ^Jayaweera, N., and Zou, J. (2025). BOSTON-PUPA: A Bayesian Online SpatioTemporal Outbreak Detection Framework With Prior Updating and P-Value Adaptation. *Statistical Analysis and Data Mining*. 18(2): e70015.
10. *Wang, Y., Zhang, Y., Zou, J., and Ravishanker, N. (2025). Online Structural Break Detection in Financial Durations. *Statistics and Computing*. 35(2), 1–19.
11. *Wei, Z., ^Salargarna, F., Murawsky, J., Si, B., Frechette, J., Carter, A., Zou, J., Yoganathan, A., and Fogel, M. (2024). Computational Fluid Dynamics is Key Predictors of Adverse Events in Single Ventricle Patients After the Fontan. *Circulation*. 140(Suppl 1), A4147784.
12. *^Wang, Y., ^Liu, H., Zou, J., and Ravishanker, N. (2024). Multivariate latent level correlation model with INLA for discrete financial time series. *Annals of Applied Statistics*. 18(3), 2462-2485.

13. *^Grabill, N., ^Wang, S., ^Olayinka, H.A., De Alwis, T.P., Khalil, Y.F., and Zou, J. (2024). AI-Augmented Failure Modes, Effects, and Criticality Analysis (AI-FMECA) for Industrial Applications. *Reliability Engineering & System Safety*. 250, 110308.
14. *^Liu, H., Zou, J., and Ravishanker, N. (2022). Biclustering high-frequency financial time series based on information theory. *Statistical Analysis and Data Mining*. 15(4), 447-462.
15. *^Liu, H., Zou, J., and Ravishanker, N. (2022). Clustering high-frequency financial time series based on information theory. *Applied Stochastic Models in Business and Industry*. 38 (1), 4-26.
16. Zhu, X., Zou, J., Mochel, M.C., and Bledsoe, J. (2022). Reply to “Limitations of multivariate survival analysis”. *Modern Pathology*. 35 (7), 994-995
17. *Zhu, X., Jamshed, S., Zou, J., and Bledsoe, J. (2021). Molecular and immunophenotypic characterization of anal squamous cell carcinoma reveals distinct clinicopathologic groups associated with HPV and TP53 mutation status. *Modern Pathology*. 34(5):10171030.
18. *^Bai, S., Lindberg, J., Whalen, G., Bathini, V., Zou, J., and Yang, M. (2021). Utility of HNF1B and a panel of lineage-specific biomarkers to optimize the diagnosis of pancreatic ductal adenocarcinoma. *American Journal of Cancer Research*. 11(3):858-865.
19. *^Al-Attar, M., Rock, K., Zhu, X., Zou, J., Dresser, K., and Jiang, Z. (2021). IRF2, A Potential Biomarker for Urothelial Carcinoma Progression. *Laboratory Investigation*. 101(S1), 526-528.
20. *^Andrei, M., Ghosh, S. and Zou, J. (2020). Dynamic Correlation Multivariate Stochastic Volatility Black-Litterman With Latent Factors. *International Journal of Statistics and Probability*. 10(2), 1-17.
21. *Yan, D., Randolph, T. W., Zou, J. and Gong, P. (2019). Incorporating deep features in the analysis of TMA images. *Statistics and its Interface*. 12(2):283-293.
22. *Wang, X., Shojaie, A. and Zou, J. (2019). Bayesian Hidden Markov Models for Dependent Large-Scale Multiple Testing. *Computational Statistics and Data Analysis*. 136:123136.
23. *^Zhang, Y., Zou, J., Ravishanker, N. and Thavaneswaran, A. (2019). Modeling Financial Durations Using Penalized Estimating Functions. *Computational Statistics and Data Analysis*. 131:145-158.
24. *Zou, J., ^Yan, H. and Zhang, Z. (2018). A Hybrid Hierarchical Bayesian Model for Spatio-Temporal Surveillance Data. *Statistics in Medicine*. 37(28):4216-4233.
25. *^Zhang, Y., Zou, J., Ravishanker, N. (2018). Structural Break Detection in Financial Durations. *Applied Stochastic Models in Business and Industry*. 34(6):992–1006.
26. *Zou, J., Wang, F. and Wu, Y. (2018). Vast Portfolio Allocation and Risk Analysis using High-Frequency Financial Data. *Statistics and Its Interface*. 11(1):141 – 152. DOI: <http://dx.doi.org/10.4310/SII.2018.v11.n1.a12>.
27. *^Liu, H., Zou, J. and Ravishanker, N. (2018). Multiple Day Biclustering of High-Frequency Financial Time Series. *Stat*. 7(1): e176. DOI: <https://doi.org/10.1002/sta4.176>.
28. *Comer, KF, Gibson, PJ, Zou, J., Rosenman, M. and Dixon, BE. (2018). Electronic Health Record (EHR)-Based Community Health Measures: An Exploratory Assessment of Perceived Usefulness by Local Health Departments. *BMC Public Health*, 18(1). DOI: 10.1186/s12889-018-5550-2.
29. *^Ansari, S.F., ^Yan, H., Zou, J., Worth, R.M. and Barbaro, N.M. (2018). Hospital Length of Stay and Readmission Rate for Neurosurgical Patients. *Neurosurgery*. 82(2):173-181. DOI: 10.1093/neuros/nyx160.
30. *^Vilelli, N.W., ^Yan, H., Zou, J. and Barbaro, N.M. (2017). The Impact of the 2006 Massachusetts Healthcare Reform on Spine Surgery Patient Payer-Mix and Age. *Journal of Neurosurgery: Spine*. 27(6):694-699. DOI: 10.3171/2017.4.SPINE161141.
31. *^Vilelli, N.W., Das, R., ^Yan, H., Huff, W., Zou, J. and Barbaro, N.M. (2017). Impact of the 2006 Massachusetts health care insurance reform on neurosurgical procedures and patient insurance status. *Journal of Neurosurgery*. 2017(Jan.);126(1):167-174.
32. *Dixon, B.E., Zou, J., Comer, K.F., Rosenman, M., Craig, J.L. and Gibson, P. (2016). Using electronic health record data to improve community health assessment. *Front Public Health Serv Sys Res*. 5(5):50–6.
33. *Wang, Y., Wu, S. and Zou, J. (2016). Quantum Annealing With Markov Chain Monte Carlo Simulations and D-Wave Quantum Computers. *Statistical Science*. 31(3):362-398.
34. *^Kim, D., Wang, Y. and Zou, J. (2016). Asymptotic theory for large volatility matrix estimation based on high-frequency financial data. *Stochastic Processes and their Applications*. 126(11):3527–3577.
35. *Hong, L. and Zou, J. (2015). Jump tests for semimartingales. *South African Actuarial Journal*. 15(1):93-108.
36. *Zou, J., Karr, A.F., Datta, G., Lynch, J. and Grannis, S. (2014). A Bayesian spatiotemporal approach for real-time detection of disease outbreaks: A case study. *BMC Medical Informatics and Decision Making*. 14:108.

37. *Wang, Y. and Zou, J. (2014). Volatility Analysis in High-Frequency Financial Data. *WIREs: Computational Statistics*, 6(6):393–404.
38. *Zou, J. and Wang, Y. (2013). Statistical Methods for Large Portfolio Risk Management. *Statistics and Its Interface*, 6, 477–485.
39. *Zou, J., Karr, A.F., Banks, D., Heaton, M., Datta, G., Lynch, J. and Vera, F. (2012). Bayesian Methodology for the Analysis of Spatial-Temporal Surveillance Data. *Statistical Analysis and Data Mining*, 5, 194–204.
40. *Heaton, M., Banks, D., Zou, J., Datta, G., Karr, A.F., Lynch, J. and Vera, F. (2012). A Spatio-Temporal Absorbing State Model for Disease and Syndromic Surveillance. *Statistics in Medicine*, 31, 2123–2136.
41. *Cressie, N., Assuncao, R., Holan, S., Levine, M., Nicolis, O., Zhang, J. and Zou, J. (2012). Dynamical Random-Set Modeling of Concentrated Precipitation in the US. *Statistics and Its Interface*, 5, 169–181.
42. *Tao, M., Wang, Y., Yao, Q., Zou, J. (2011). Large Volatility Matrix Inference via Combining Low-Frequency and High-Frequency Approaches. *Journal of the American Statistical Association*, 106, 1025–1040.
43. *Wang, Y. and Zou, J. (2010). Vast Volatility Matrix Estimation for High-Frequency Financial Data. *Annals of Statistics*, 38, 943–978.
44. *Duan, J., Wang, Y. and Zou, J. (2009). The Speed of Option Price Convergence from GARCH to Diffusion Models. *International Journal of Theoretical and Applied Finance*, 12, 359–391.
45. *Zhang, H. and Zou, J. (2002). Research on Distributed Multimedia Network Collaborative Platform. *Journal of Computer Engineering and Applications* 17, 172–174.

BOOK CHAPTERS

46. *Yan, H., Zhang, Z and Zou, J. (2018). Dynamic Space-Time Model for Syndromic Surveillance with Particle Filters and Dirichlet Process. In: Blasch, E., Ravela, S., Aved, A. (Eds.) *Handbook of Dynamic Data Driven Application Systems*. Springer, Cham. 139-152. DOI: <https://doi.org/10.1007/978-3-319-95504-9>
47. *Zou J., Zhang H. (2016) High-Frequency Financial Statistics Through High-Performance Computing. In: Arora R. (eds) *Conquering Big Data with High Performance Computing*. Springer, Cham.
48. *Zou, J. and Huang, H. (2013). On Portfolio Allocation: A Comparison of Using LowFrequency and High-Frequency Financial Data. *Topics in Applied Statistics*, Hu, M.; Liu, Y. & Lin, J. (Eds.) Springer New York, 55, 13–22.

PUBLISHED PROCEEDINGS

49. *Tlachac, M., Rundensteiner, E., Barton, K., Troppy, S., Beaulac, K., Doron, S. and Zou, J. (2018). CASSIA: An Assistant for Identifying Clinically and Statistically Significant Decreases in Antimicrobial Susceptibility. *Proceedings of 2018 IEEE International Conference on Biomedical and Health Informatics (BHI)*, Las Vegas, NV, 2018, pp. 389-392. DOI: 10.1109/BHI.2018.8333450
50. *Yan, H., Zhang, Z. Zou, J. (2017). An Online Spatio-Temporal Model for Inference and Predictions of Taxi Demand. *Proceedings of IEEE International Conference on Big Data 2017*, 3550-3557. DOI: 10.1109/BigData.2017.8258345
51. *Patikorn, T., Selent, D., Heffernan, N., Beck, J. and Zou, J. (2017). Using a Single Model Trained across Multiple Experiments to Improve the Detection of Treatment Effects. *Proceedings of International Conference on Educational Data Mining (EDM) 2017*, 202–207.
52. *Yin, B., Botelho, A., Patikorn, T., Heffernan, N. and Zou, J. (2017). Causal Forest vs. Naive Causal Forest in Detecting Personalization: An Empirical Study in ASSISTments. *Proceedings of International Conference on Educational Data Mining (EDM) 2017*, 388–389.
53. *Patikorn, T., Heffernan, N. and Zou, J. (2017). An Offline Individual Treatment Rule Evaluation Method and How to Find Heterogeneous Treatment Effect. *Proceedings of International Conference on Educational Data Mining (EDM) 2017*, 390–391.
54. *Zou, J. and Huang, C. (2016). Efficient Portfolio Allocation with Sparse Volatility Estimation for High-Frequency Financial Data. *Proceedings of IEEE International Conference on Big Data 2016*, 2332-2341. DOI: 10.1109/BigData.2016.7840866

55. *Zou, J., ^An, Y. and ^Yan, H. (2015). Volatility Matrix Inference in High-Frequency Finance with Regularization and Efficient Computations. Proceedings of IEEE International Conference on Big Data 2015, 2437-2444. DOI: 10.1109/BigData.2015.7364038
56. *Zou, J. and Zhang, H. (2014). High-frequency financial statistics with parallel R and Intel Xeon Phi coprocessor. Proceedings of IEEE International Conference on Big Data 2014, 61–69. DOI: 10.1109/BigData.2014.7004414
57. *Zou, J. and Wang, X. (2002). Research on a Multimedia Network Real-Time Monitor Control Platform. Proceedings of Distributed and Parallel Computing Symposium, 20–24.

PUBLISHED ABSTRACTS

58. Komalasari, R., Hill, N., Malatyali, A., Lopez, J., Garcia-Retortillo, S., Zou, J., Decker, V., Thiamwong, L. (2025). Fear of Falling and Subjective Cognitive Decline in Racially Diverse Adults Aged 60+ in Low-Income Communities, *Innovation in Aging*, 9 (Suppl.), igaf122.3771.

DISSERTATION

Zou, J. (2009). “Volatility estimation and option pricing”, (Doctoral Dissertation, University of Connecticut, Storrs, CT 2009). Dissertation Chair: Dr. Yazhen Wang

RESEARCH AND GRANTS

RESEARCH GRANTS AND SCHOLARLY PROJECTS—FUNDED

Year	Title, Funding Agency, Role, Investigators	Amount
2026-2027	Co-I, Health Outcomes Associated with Algal Blooms of Cyanobacteria and Red Tide in Florida: Long-Term Health Impacts of Harmful Algal Bloom Exposure, Phase 2. University of Central Florida and Florida Gulf Coast University. Florida Department of Health. Continuation of the DoH study. PI: R. Koszalinski.	\$364,288
2023-2026	Senior Personnel, National Science Foundation, “REU Site: Research Experiences for Undergraduates in Industrial Mathematics and Statistics.” Advised on three REU projects over three summers. PI: B. Peiris.	\$412,937
2019-2021	Co-PI, Army Research Lab (ARL), “Data Sciences, AI and Machine Learning for Army Applications.” Received faculty summer support and a research assistant. PI: E. Rundensteiner.	\$854,000
2020-2022	Co-PI, TRIADs: WPI Interdisciplinary Seed Grant Pilot, “SUPER BUGS, Genomics-driven molecular and epidemiological modeling of multidrug resistance.” Received faculty support for statistical modeling and data analysis. PI: R. Rao.	\$60,000
2019-2022	Senior Personnel, National Science Foundation, “REU Site: Research Experiences for Undergraduates in Data Science.” Advised on one REU project over one summer. PI: E. Rundensteiner.	\$366,000
2018-2021	Senior Personnel, National Science Foundation, “REU Site: Research Experiences for Undergraduates in Industrial Mathematics and Statistics.” PI: B. Tilley.	\$388,517
2016-2019	Senior Personnel, National Science Foundation, “REU Site: Research Experiences for Undergraduates in Data Science.” Advised on two REU projects over two summers. PI: E. Rundensteiner.	\$367,500

2015-2017	PI, National Science Foundation (TG-DMS150005), “Monte Carlo Simulation of Quantum Evolution,” XSEDE computing resources at Texas Advanced Computing Center; Stampede: 50000 SUs; Ranch: 500 GB.	\$3,000
2013-2015	Co-PI, Robert Wood Johnson Foundation (I.D. 71271), “Leveraging Integrated Electronic Data Sources to Improve Population Health Assessment at Local Levels.” PI: B. Dixon.	\$200,000
2013-2015	PI, National Science Foundation (TG-DMS130018), “Cluster-enabled Large Scale High-frequency Financial Data Analytics,” XSEDE computing resources at Texas Advanced Computing Center; Stampede: 75000 SUs; Ranch: 500 GB.	\$4,500
2012-2014	PI, Subcontract of National Science Foundation (DMS-0914906) grant from the National Institute of Statistical Sciences, “Collaborative Research for Developing ATD: Bayesian Methods in Syndromic Surveillance: CAR Models and Computational Implementation.”	\$644,019
2013-2014	Senior Personnel, National Institute of Health (K23HD057130), “Neighborhood poverty and sexually transmitted infections.” PI: S. Wiehe	\$100,000

EDUCATIONAL GRANTS—FUNDED

Year	Title, Funding Agency, Role, Investigators	Amount
2025	Co-PI, UCF CON INTERNAL RESEARCH SUPPORT MECHANISM (Non-Grant)-Funded. Spatial Analysis of FL HABs and Human Health Data. Purpose: graduate student support to train with Drs. Zou and Koszalinski.	\$2,225
2026	Co-PI, UCF CON INTERNAL RESEARCH SUPPORT MECHANISM (Non-Grant)-Funded. Support and training of an Undergraduate Student in Spatial Analysis of FL DoH Funded HAB and Human Health Data with Drs. Zou and Koszalinski.	\$1,500

RESEARCH, EDUCATIONAL, AND PROJECT APPLICATIONS SUBMITTED—PENDING

Year	Title, Funding Agency, Role, Investigators	Amount
2026-2030	Co-I, National Heart, Lung, and Blood Institute (NHLBI), “A Novel Flow Modeling Paradigm for Hemodynamics in Fetal Aorta and Its Application to the Diagnosis/Prognosis of Fetal Coarctation of the Aorta.” Submitted. PI: Z. Wei.	\$3,336,774
2026-2027	Co-PI, Florida Cancer Innovation Fund, “Medication and Substance-Use Risk Patterns and Cognitive/Functional Outcomes in Florida Middle-aged and Older Cancer Survivors: A One-Year Mixed-Methods Study.” Submitted. PI: Y. Lee	\$570,000

CONSULTING GRANTS

Year	Title, Organization, Role	Amount
2013	Hologic, Inc., Indianapolis, IN: “Multifactor Experimental Design and Analysis for Cancer Diagnostic Devices,” PI.	\$5,000
2012	Polymer Technology Systems, Inc., Indianapolis, IN: “Statistical Modeling of Variation Adjustment and Outlier Detection for Polymer Technology Systems,” PI.	\$8,000

PRESENTATIONS

INTERNATIONAL

Month/Year	Title/Conference/Location	Type
12/2025	“Sequential Bayesian Spatio-Temporal Outbreak Detection.” 19th International Joint Conference on Computational and Financial Econometrics (CFE) and Computational and Methodological Statistics (CMStatistics), CFE-CMStatistics 2025. London, UK, December, 2025.	Invited
06/2025	“BOSTON-PUPA: a Bayesian online spatio-temporal outbreak detection framework with prior updating and p-value adaptation.” ICSA 2025 Applied Statistics Symposium, Storrs, CT, June, 2025.	Invited
06/2022	“Information Theory-Based Pattern Detection for High-Frequency Financial Time Series.” ICSA 2022 Applied Statistics Symposium, Gainesville, FL, June, 2022.	Invited/Declined
11/2021	“Hybrid Hierarchical Spatio-Temporal Methodologies: Model Reduction and Filtering.” 5th EAC-ISBA Conference, November, 2021.	Invited
12/2020	“Clustering and Bi-Clustering for High-Frequency Financial Time Series Based on Mutual Information.” 2020 International Virtual Conference on Advanced Statistical Techniques in Business and Industry. December, 2020.	Invited
08/2020	“Clustering and Bi-Clustering for High-Frequency Financial Time Series Based on Mutual Information.” 2020 Joint Statistics Meetings. Virtual. August, 2020.	Invited
06/2020	“Hybrid Hierarchical Spatio-Temporal Methodologies: Model Reduction and Filtering.” EAC-ISBA 2020 Conference, Dali, China, June, 2020.	Invited
07/2018	“When Big Data Meet Financial Statistics: A Data Science Perspective.” 2018 ICSA China Conference, Qingdao, China, July, 2018.	Invited
06/2018	“A Hybrid Hierarchical Bayesian Model for Spatio-Temporal Surveillance Data.” ICSA 2018 Applied Statistics Symposium, New Brunswick, NJ, June, 2018.	Invited
12/2017	“An Online Spatio-Temporal Model for Inference and Predictions of Taxi Demand.” 2017 IEEE International Conference on Big Data, Boston, MA, December, 2017.	Podium
08/2017	“Efficient Portfolio Allocation with Sparse Volatility Estimation for High-Frequency Financial Data”, Joint Statistical Meetings, Baltimore, MD, August, 2017.	Podium
06/2017	“Efficient Portfolio Allocation with Sparse Volatility Estimation for High-Frequency Financial Data”, International Society for Business and Industrial Statistics (ISBIS) 2017 Meeting on Statistics in Business Analytics, Yorktown Heights, NY, June, 2017.	Invited
12/2016	“Efficient Portfolio Allocation with Sparse Volatility Estimation for High-Frequency Financial Data”, IEEE International Conference on Big Data 2016 (IEEE BigData 2016), Washington DC, December, 2016.	Podium
08/2016	“Volatility Matrix Inference in High-Frequency Finance with Regularization and Efficient Computations”, Joint Statistical Meetings, Chicago, IL, August, 2016.	Podium
06/2016	“Conquering Big Data in Volatility Inference and Risk Management”, International Symposium on Business and Industrial Statistics, Barcelona, Spain, June, 2016.	Invited
10/2015	“Volatility Matrix Inference in High-Frequency Finance with Regularization and Efficient Computations”, IEEE International Conference on Big Data 2015 (IEEE BigData 2015), Santa Clara, CA, October, 2015.	Invited

Month/Year	Title/Conference/Location	Type
08/2015	“High-frequency financial statistics with parallel R and Intel Xeon Phi coprocessor”, Joint Statistical Meetings, Seattle, WA, August, 2015.	Podium
07/2015	“Bayesian Spatio-Temporal Methodology for Biosurveillance”, 60th ISI World Statistics Congress, Rio de Janeiro, Brazil, July, 2015.	Invited
06/2015	“High Performance Computations for Statistical Methods in High-Frequency Finance”, Fifth International IMS-FIPS Workshop, New Brunswick, NJ, June, 2015	Invited
10/2014	“High-frequency financial statistics with parallel R and Intel Xeon Phi coprocessor”, IEEE International Conference on Big Data 2014 (IEEE BigData 2014), Washington DC, October, 2014.	Invited
08/2014	“Statistical Methods for Large Portfolio Risk Management”, Joint Statistical Meetings, Boston, MA, August, 2014.	Invited
06/2014	“Statistical Methods for Large Portfolio Risk Management”, International Symposium on Financial Engineering and Risk Management 2014 (FERM 2014), Beijing, China, June, 2014.	Invited
06/2014	“High Performance Computations and Statistical Methods for Large Portfolio Risk Management”, Department of Computer Science Colloquium, Shandong University, Jinan, China, June, 2014.	Invited
06/2014	“Statistical Methods for Large Portfolio Risk Management”, Department of Statistics Colloquium, Shanghai University of Finance and Economics, Shanghai, China, June, 2014.	Invited
05/2014	“Bayesian Spatio-Temporal Methodology for Real-Time Detection of Disease Outbreaks”, School of Mathematics Lingnan Special Lecture, Sun Yat-Sen University, Guangzhou, China, May, 2014.	Invited

NATIONAL

Month/Year	Title/Conference/Location	Type
06/2017	“Dynamic Space-Time Model for Syndromic Surveillance with Particle Filters and Dirichlet Process”, QPRC 2017: The 34th Quality and Productivity Research Conference, Storrs, CT, June, 2017.	Invited
05/2016	“Conquering Big Data in Volatility Inference and Risk Management”, SAMSI Games and Decisions in Reliability and Risk Workshop, RTP, NC, May, 2016.	Podium

REGIONAL

Month/Year	Title/Conference/Location	Type
05/2024	“BOSTON-PUPA: a Bayesian online spatio-temporal outbreak detection framework with prior updating and p-value adaptation.” 38th New England Statistics Symposium, Storrs, CT, May, 2024.	Invited
06/2023	“Latent level correlation modeling of multivariate discrete-valued financial time series.” 37th New England Statistics Symposium, Boston, MA, June, 2023.	Invited
05/2022	“Biclustering high-frequency financial time series based on information theory.” 36th New England Statistics Symposium, Storrs, CT, May, 2022.	Invited
02/2021	“Pattern Detection for High-Frequency Financial Time Series via Clustering and Bi-Clustering.” Statistics and Data Science Seminar, University of Illinois Chicago, February, 2021.	Invited

10/2021	“Multivariate Latent Correlation Model with INLA for Discrete Financial Time Series.” The 34th New England Statistics Symposium, October, 2021.	Invited
10/2021	“Pattern Detection for High-Frequency Financial Time Series via Clustering and Bi-Clustering.” Department Colloquium, University of Georgia, October, 2021.	Invited
10/2019	“Hybrid Hierarchical Spatio-Temporal Methodologies: Model Reduction and Filtering.” Departmental Colloquium, University of Rhode Island, Kingstown, RI, October, 2019.	Invited
05/2019	“Learning Low-Dimensional Manifolds for the Scoring of Tissue Microarray Images”, 33th New England Statistics Symposium, Hartford, CT, May, 2019.	Invited
04/2017	“High Dimensional Dynamic Modeling for Massive Spatio-Temporal Data”, 31th New England Statistics Symposium, Storrs, CT, April, 2017.	Invited
10/2016	“Conquering Big Data in Volatility Inference and Risk Management”, Department of Mathematical Sciences Colloquium, Northeastern University, Boston, MA, October, 2016.	Invited
04/2016	“Conquering Big Data in Volatility Inference and Risk Management”, Department of Mathematical Sciences Colloquium, UMass, Dartmouth, MA, April, 2016.	Invited
03/2016	“Conquering Big Data in Volatility Inference and Risk Management”, Department of Mathematical Sciences Colloquium, UMass, Amherst, MA, March, 2016.	Invited
10/2015	“Volatility Matrix Inference in High-Frequency Finance with Regularization and Efficient Computations”, Department of Mathematical Sciences Colloquium, Boston University, Boston, MA, October, 2015.	Invited
04/2015	“Statistical Methods for Large Portfolio Risk Management”, 29th New England Statistics Symposium, Storrs, CT, April, 2015.	Invited
02/2015	“Bayesian Spatio-Temporal Methodology for Biosurveillance”, Department of Statistics Colloquium, University of Connecticut, Storrs, CT, February, 2015.	Invited
04/2014	“Bayesian Spatio-Temporal Methodology for Real-Time Detection of Disease Outbreaks”, Department of Mathematical Sciences Colloquium, Worcester Polytechnic Institute, Worcester, MA, April, 2014.	Invited
01/2014	“Statistical Methods for Large Portfolio Risk Management”, Department of Statistics Colloquium, Purdue University, West Lafayette, IN, January, 2014.	Invited

STATE/LOCAL

Month/Year	Title/Conference/Location	Type
02/2026	“Detecting Outbreaks Early in Real Time: A Bayesian Spatio-Temporal Method for Streaming Surveillance Data.” UCF Rosen College of Hospitality Management Research Colloquium. Orlando, February, 2026.	Invited
09/2024	“Latent level correlation modeling of multivariate discrete-valued financial time series.” Statistics and Data Science Colloquium, University of Central Florida, September, 2024.	Invited

TEACHING-RELATED ACTIVITIES

PROJECT ADVISEMENT AND MENTORING AT UCF

GRADUATE DISSERTATION / THESIS / PROJECT ADVISING

Dates	Student	Title	Role
2025-Present	Pattama Ulrich (PhD)	PFAS Exposure, Inflammation, and Disrupted Vitamin D Homeostasis: A One Health Perspective	Committee
2025-Present	George Ngo (PhD)	Illness Uncertainty and Symptom Perception in Heart Failure Self-Care Management	Committee

HONORS UNDERGRADUATE THESIS (HUT) / OTHER PROJECT ADVISING

Dates	Student	Title	Role
2026-Present	Taylor Fordham (HUT)	Evaluating the Use of AI in ESBAR Communication and Clinical Reasoning Among Nursing Students and Nurses	Chair
2026-Present	Ngoc Van (HUT)	Human–Computer Interaction to Improve Chronic Disease Care	Committee

TEACHING AND CURRICULUM INNOVATIONS AT UCF

- Developed a fully online, 9-credit Artificial Intelligence (AI) in Health Graduate Certificate at the UCF College of Nursing.
- Designed an interdisciplinary curriculum for learners in nursing, medicine, public health, health informatics, and related fields.
- Developed a certificate structure consisting of two new core courses, NGR 6862 Essentials of AI in Health and NGR 6865 AI Data Analysis and Research in Health, plus one elective.
- Emphasized foundational AI and machine learning concepts, ethical and responsible AI use, data-driven healthcare applications, interdisciplinary collaboration, and communication of AI-related insights to diverse stakeholders.

TEACHING AND CURRICULUM INNOVATIONS AT WPI

1. As Associate Department Head of Mathematical Sciences, actively collaborated with interdisciplinary teams to design innovative curricula and research initiatives that bridged statistics, finance, and AI technology.
2. Facilitated strategic partnerships and industry engagement, curriculum development that aligns with current trends in financial technology and artificial intelligence.
3. Key contributor to the development of the new Bachelor of Science degree program in Data Science. Collaborated with all three departments/units within the Data Science program to establish degree requirements and integrate them into the curriculum.
4. Designed and developed a new graduate course, “Computational Statistics”. Extensive use of project-based learning in course curriculum, focusing on real-world applications using publicly available data. This course was first offered as MA590 in Spring of 2017 and became MA 551 in 2020.
5. Worked with the undergraduate committee and Prof. Fangfang Wang to develop an experimental course, “Introduction to Time Series Analysis”. Helped to design and draft the course proposal, and lead the discussion in the departmental meetings to facilitate the approval. Topics include autocorrelation function, partial autocorrelation function, extended autocorrelation function, autoregressive-moving-average models, models for seasonal time series, unit-root test, integrated processes, distributed lag models, and transfer function models. Optional topics may include conditional heteroscedastic models and the Kalman filter. This course was first offered as MA464X in D term of 2022 and became MA 4644 in 2024.
6. Worked with the undergraduate committee and Prof. Randy Paffenroth to develop an experimental course, “Data Analytics and Statistical Learning”. Helped to design and draft the course proposal, and lead the discussion in the departmental meetings to facilitate the approval. Topics include regression; classification/clustering; sampling methods (bootstrap and cross validation); and decision tree learning. This course was first offered as MA463X in D term of 2017 and became MA 4635 in 2019.

COURSES TAUGHT

University of Central Florida, College of Nursing

Semester / Year	Course	Course Title	Enrolled	Program
Spring 2026	NGR 7827	Concepts, Measurement & Data Management	25	Graduate
	NGR 6908	Independent Study	1	Graduate
Fall 2025	NGR 7827	Concepts, Measurement & Data Management	16	Graduate

Worcester Polytechnic Institute, School of Arts & Sciences

Semester / Year	Course	Course Title	Enrolled	Program
D25 Term	MA2611	Applied Statistics I	83	Undergraduate
B24 Term	MA2611	Applied Statistics I	123	Undergraduate
A24 Term	MA2611	Applied Statistics I	53	Undergraduate
B23 Term	MA2612	Applied Statistics II	122	Undergraduate
A23 Term	MA2611	Applied Statistics I	56	Undergraduate
B22 Term	MA2612	Applied Statistics II	85	Undergraduate
A22 Term	MA2611	Applied Statistics I	66	Undergraduate
B21 Term	MA2611	Applied Statistics I	163	Undergraduate
Fall 2021	MA511	Applied Statistics for Engineers & Scientists	39	Graduate
B20 Term	MA2612	Applied Statistics II	70	Undergraduate
D20 Term	MA2612	Applied Statistics II	79	Undergraduate
D20 Term	MA2611	Applied Statistics I	130	Undergraduate
Fall 2019	MA590	Computational Statistics	12	Graduate
D19 Term	MA2612	Applied Statistics II	100	Undergraduate
B19 Term	MA2612	Applied Statistics II	70	Undergraduate
Spring 2019	MA542	Regression Analysis	15	Graduate
Fall 2018	MA590	Computational Statistics	10	Graduate
D18 Term	MA2612	Applied Statistics II	98	Undergraduate
B18 Term	MA2612	Applied Statistics II	92	Undergraduate
D17 Term	MA2612	Applied Statistics II	92	Undergraduate
Fall 2016	MA550	Time Series Analysis	27	Graduate
D16 Term	MA2612	Applied Statistics II	100	Undergraduate
A16 Term	MA2611	Applied Statistics I	107	Undergraduate
Fall 2015	MA554	Applied Multivariate Analysis	14	Graduate
D15 Term	MA2612	Applied Statistics II	89	Undergraduate
C15 Term	MA2611	Applied Statistics I	108	Undergraduate

Indiana University-Purdue University Indianapolis, School of Arts & Sciences

Semester / Year	Course	Course Title	Enrolled	Program
Spring 2014	STAT520	Time Series and Applications	13	Graduate
Spring 2014	STAT350	Introduction to Statistics	38	Undergraduate

Semester / Year	Course	Course Title	Enrolled	Program
Fall 2013	STAT521	Statistical Computing	13	Graduate
Fall 2013	STAT350	Introduction to Statistics	38	Undergraduate
Spring 2013	STAT520	Time Series and Applications	8	Graduate
Fall 2012	STAT521	Statistical Computing	13	Graduate
Fall 2012	STAT350	Introduction to Statistics	39	Undergraduate
Spring 2012	STAT520	Time Series and Applications	13	Graduate
Fall 2011	STAT521	Statistical Computing	14	Graduate
Fall 2011	STAT350	Introduction to Statistics	36	Undergraduate

UNDERGRADUATE PROJECT ADVISING AT WPI

1. **INTERACTIVE QUALIFYING PROJECTS (IQPs)** at WPI are interdisciplinary projects completed by each undergraduate student (in cross-major teams or individually) aimed at addressing a problem or need arising at the intersection of science and society. These projects are the equivalent of three undergraduate courses and result in a published written report.

AY 2014/2015, Terms B/C (Worcester Project Center)

1. Commercial Kitchen Profitability (Sponsor: Worcester Regional Food Hub)
 - Students: Nicholas Comei, Thomas Danko, Ashley Nistler, Michael Vaitkunas
2. Assistive Technology Intervention Process (Sponsor: Seven Hills Foundation)
 - Students: Jahan Dadlani, Joseph Fainer, David Goodrich, Jacob Hackett
3. Abby's House 40th Anniversary Video (Sponsor: Abby's House)
 - Students: William Beatty, Elizabeth Bliss, Jordan Feeley, Arianna Smith
4. Family Accessibility of the Worcester Art Museum (Sponsor: Worcester Art Museum)
 - Students: Michael Caldwell, Sebastian Espinosa, Dylan Roche, Bruno Scherrer
5. Marketing and Recruiting College Student Volunteers for Habitat for Humanity Metro West ReStore (Sponsor: Habitat for Humanity)
 - Students: Christian Daskocil, Julie Valim, Kevin Wormer

2. **MAJOR QUALIFYING PROJECTS (MQPs)** at WPI are senior capstone projects completed by each undergraduate student (in teams or individually) involving high-level research that addresses a problem of interest in their area of study. These capstone projects are the equivalent of three undergraduate courses and result in a published written report, typically along with an oral and/or poster presentation. I advised or co-advised the following MQPs:

1. Data-Driven Marketing Analysis for Music Worcester
 - AY 2024/2025, Terms A/B/C, co-advised with Prof. Fangfang Wang (MA)
 - Students: Nate Kaalman, Aayan Krishan, Keyang Li, Paige Scully
2. Mining Graph Patterns in Software Repositories
 - AY 2023/2024, Terms A/B/C/D, co-advised with Prof. Fabricio Murai (CS)
 - Students: Nur Fateemah, Alexander MacDonald, Jakob Simmons, Ethan Vaz Falcao
3. Analyzing the Dynamic Relationship Between Intraday Trading Activity and Volatility Using High-Frequency Data
 - AY 2020/2021, Terms A/B/C, co-advised with Prof. Fangfang Wang (MA)
 - Students: Emily Baker, Ryan Candy, Isadora Coughlin
4. Analysis of AM-241 Resuspension into Atmosphere
 - AY 2018/2019, Terms A/B/C/D, co-advised with Profs. David Medich (PH) and Zhongqiang Zhang (MA)
 - Student: Paula Sarrion Silvestre
5. Flexible Infrastructure Supporting Machine Learning for Anomaly Detection in Big Data (Sponsor: ACI Worldwide)

- AY 2016/2017, Terms A/B/C/D, co-advised with Prof. Elke Rundensteiner (CS)
 - Students: Erin Esco, Alexander Huot, Yihong Zhou, Ziyang Ding
6. Statistical method for risk management and portfolio theory
- AY 2014/2015, Terms D/A/B
 - Student: Zhenyan Li

3. OTHER UNDERGRADUATE PROJECTS

1. Use of AI algorithms to predict the remaining useful life (RUL) of aircraft safety-critical equipment
 - Center for Industrial Mathematics and Statistics Research Experiences for Undergraduates (REU), Summer 2025
 - Students: Angelina Legkodimov (University of Delaware), Patrick (Eunsang) Park (University of California, Merced), Pranav Tikkawarand (Rutgers University), and Andres Rocha (California Polytechnic State University)
 - Two papers in preparation
2. AI and Risk Modeling for System Reliability and Safety Engineering
 - Center for Industrial Mathematics and Statistics Research Experiences for Undergraduates (REU), Summer 2024
 - Students: Evan Brody (New York University), Karl Ramus (Worcester Polytechnic Institute), and Esther Yu (Cornell University)
 - Two papers submitted for publication
3. AI-augmented Reliability Predictions using Failure Modes, Effects, and Criticality Analysis for Industrial Applications
 - Center for Industrial Mathematics and Statistics Research Experiences for Undergraduates (REU), Summer 2023
 - Students: Nicholas Grabilla (University of Michigan) and Stephanie Wang (University of Rochester)
 - Paper presented at the 2023 Society for Industrial and Applied Mathematics (SIAM) Annual Meeting
 - Paper presented at the 2024 Joint Mathematics Annual Meeting (JMM)
4. CityView 2.0: Informative Urban Mobility Data Visualization
 - Data Science Research Experiences for Undergraduates (REU), Summer 2018
 - Students: Vindhya Kuchibhotla (Boston University) and Emmanuel Odofin (Lincoln University)
 - Poster presented at the 2018 WPI Summer Undergraduate Research Showcase
5. SURV: A Visualization System for Massive Urban Data
 - Data Science Research Experiences for Undergraduates (REU), Summer 2017
 - Students: Christian Huacon (Hostos Community College) and Lucas Pelegrin (Michigan Technological University)
 - Paper presented at the 2017 IEEE MIT Undergraduate Research Technology Conference
6. Deep Learning for Multi-Task Network Extraction from Time Series Data
 - Research Experiences for Undergraduates (REU), Summer 2016
 - Students: Rajeshware Majumdar (University of Connecticut) and Puja Trivedi (University of Maryland)
 - Poster presented at the 2016 Annual Biomedical Research Conference for Minority Students (ABRCMS)

GRADUATE CAPSTONE PROJECTS, THESES AND DISSERTATIONS ADVISED

Served as Major PhD Advisor:

1. Yanzhao Wang, PhD Dissertation (Statistics), New developments in sequential change point detection for time series and spatio-temporal analysis, graduation date: May, 2023.
2. Haitao Liu, PhD Dissertation (Data Science), Patterns Detection on Multivariate HighFrequency Time Series, graduation date: May, 2020.
3. Hong Yan, PhD Dissertation (Statistics), Hybrid Hierarchical Spatio-Temporal Methodologies: Model Reduction and Filtering, graduation date: December, 2018.

Served as PhD Dissertation Committee Member:

4. Pattama Ulrich, PhD Dissertation (Nursing Science), TBD.
5. George Ngo, PhD Dissertation (Nursing Science), TBD.
6. Shaoming Yin, PhD Dissertation (Data Science), Comprehensive Evaluation of the Relative Performance of Cohort Balancing Methods for Estimating Marginal Hazard Ratios in Small to Moderate Sample Size Scenarios, expected graduation date: May, 2026.
7. Mingzhi Hu, PhD Dissertation (Data Science), Data Mining and Foundational Models for Spatial-Temporal Data, expected graduation date: May, 2026.
8. Shuaichuan Feng, PhD Dissertation (Statistics), Innovative Statistical Methods for Genetic Data Analysis: Heritability Estimation and P-Value Combination, graduation date: August, 2025

INDEPENDENT STUDIES AT WPI

Note: Most of the independent studies are offered upon students' requests due to lack of advanced graduate course offerings in research topics.

1. Fall 2014, INDEPENDENT STUDY/GRADUATE - ISG JZ2 597: Hong Yan
2. Fall 2014, INDEPENDENT STUDY/GRADUATE - ISG JZ2 595: Hong Zhang
3. Fall 2014, MS THESIS - THES JZ2 599: Dongchen Jiang
4. Spring 2015, ADVANCED TIME SERIES ANALYSIS - ISG JZ2 595: Hong Yan
5. Spring 2015, MS THESIS - THES JZ2 599: Dongchen Jiang
6. Summer 2015, INDEPENDENT STUDY/GRADUATE - ISG JZ2 596: Yunbo An
7. Fall 2015, DIRECTED RESEARCH/GRADUATE - DR JZ2 598: Hong Yan
8. Fall 2015, ADVANCED TIME SERIES ANALYSIS - ISG JZ2 595: Lu Chen
9. Spring 2016, INDEPENDENT STUDY/GRADUATE - ISG JZ2 595A: Hong Yan
10. Spring 2016, STATISTICAL SEMINAR - ISG JZ2 595B: Hong Yan
11. Spring 2016, DIRECTED RESEARCH/GRADUATE - DR JZ2 598: Chuqin Huang
12. Fall 2016, DIRECTED RESEARCH/GRADUATE - DR JZ2 598: Chuqin Huang
13. Fall 2016, INDEPENDENT STUDY/GRADUATE - ISG JZ2 595: Yuan Yu
14. Fall 2016, PHD DISSERTATION - PHD JZ2 699: Hong Yan
15. Spring 2017, DIRECTED RESEARCH/GRADUATE - DR JZ2 598: Haitao Liu
16. Spring 2017, INDEPENDENT STUDY/GRADUATE - ISG JZ2 595: Patchara Santawisook
17. Spring 2017, INDEPENDENT STUDY/GRADUATE - ISG JZ2 595D: Wenjing Li
18. Spring 2017, MATH CAPSTONE - ISG JZ2 596: Jiaxin Liu, Chi Zhang, Shanshan Zhou, Tianyu Zou
19. Spring 2017, PHD DISSERTATION - PHD JZ2 699: Hong Yan
20. Fall 2017, PHD DISSERTATION - PHD JZ2 699: Hong Yan
21. Spring 2018, PHD DISSERTATION - PHD JZ2 699: Hong Yan
22. Spring 2018, PHD DISSERTATION - PHD JZ2 699: Haitao Liu
23. Fall 2018, PHD DISSERTATION - PHD JZ2 699: Hong Yan
24. Fall 2018, PHD DISSERTATION - PHD JZ2 699: Haitao Liu
25. Spring 2019, PHD DISSERTATION - PHD JZ2 699: Haitao Liu
26. Spring 2019, INDEPENDENT STUDY/GRADUATE - ISG JZ2 595: Yanzhao Wang
27. Fall 2020, PHD DISSERTATION - PHD JZ2 699: Yanzhao Wang
28. Spring 2021, PHD DISSERTATION - PHD JZ2 699: Yanzhao Wang
29. Fall 2021, PHD DISSERTATION - PHD JZ2 699: Yanzhao Wang
30. Spring 2022, PHD DISSERTATION - PHD JZ2 699: Yanzhao Wang
31. Fall 2022, PHD DISSERTATION - PHD JZ2 699: Yanzhao Wang
32. Fall 2022, INDEPENDENT STUDY/GRADUATE - DS 596: Aidan Horn
33. Fall 2022, INDEPENDENT STUDY/GRADUATE - MA 595: Xiaoyu Chen
34. Spring 2023, PHD DISSERTATION - PHD JZ2 699: Yanzhao Wang
35. Spring 2024, Master's Capstone - MA 596: Hammed Olayinka

ACADEMIC ADVISING AT WPI

Postdocs Advisees:

1. Mihnea Andrei, Currently Data Scientist at TotalSoft

2. Gonzalo Contador, Currently Assistant Professor at Universidad Técnica Federico Santa María (Federico Santa María Technical University)
3. Yevgeniy Ptukhin, Currently Assistant Professor at Western Illinois University
4. Nadeesha Jayaweera, Currently Assistant Professor at University of Akron
5. Tharindu De Alwis, Currently Assistant Professor at University of West Florida

Graduate Students Advised:

PhD Advisees:

1. Trymain Rivero (PhD Student, Big Data Analytics)
2. Chen, Lu (PhD Student, Statistics)
3. Feng, Shuaichuan (PhD Student, Statistics)
4. Liu, Haitao (PhD Student, Data Science)
5. Liu, Wen (PhD Student, Data Science)
6. Liu, Yang (PhD Student, Statistics)
7. Manandhar, Binod (PhD Student, Statistics)
8. Wang, Yanzhao (PhD Student, Statistics)
9. Yan, Hong (PhD Student, Statistics)
10. Yin, Biao (PhD Student, Data Science)
11. Yin, Jiani (PhD Student, Statistics)
12. Yu, Yuan (PhD Student, Statistics)
13. Zhang, Hong (PhD Student, Statistics)
14. Hu, Mingzhi (PhD Student, Data Science)
15. Chen, Xiaoyu (PhD Student, Statistics)
16. Zhang, Kai (PhD Student, Data Science)

Master Thesis and Project Advisees:

17. Jiang, Dongchen (Master Student, Applied Statistics)
18. An, Yunbo (Master Student, Financial Mathematics)
19. Bu, Fan (Master Student, Applied Statistics)
20. Huang, Chuqin (Master Student, Applied Statistics)
21. Liu, Jiaxin (Master Student, Applied Statistics)
22. Zhang, Chi (Master Student, Applied Statistics)
23. Zhou, Shanshan (Master Student, Applied Statistics)
24. Zou, Tianyu (Master Student, Applied Statistics)
25. Liu, Zixiao (Master Student, Applied Statistics)
26. Yang, Ruofan (Master Student, Applied Statistics)
27. AYGÜL, Özge (Master Student, Data Science)
37. Master Academic Advisees:
28. Famelia, Cut (Fullbright Student, Data Science)
29. Ding, Yichen (Master Student, Data Science)
30. Jain, Jinal Jayantilal (Master Student, Data Science)
31. Jiang, Chenjie (Master Student, Data Science)
32. Jiang, Yulong (Master Student, Applied Math)
33. Khandelwal, Mukund (Master Student, Data Science)
34. Kothari, Janvi Kirti Kumar (Master Student, Data Science)
35. Li, Mengdi (Master Student, Data Science)
36. Li, Zhitao (Master Student, Data Science)
37. Niu, Mu (Master Student, Data Science)
38. Pasini, Jose (Master Student, Data Science)
39. Su, Zhaoning (Master Student, Data Science)
40. Wang, Ye (Master Student, Data Science)
41. Yue, Yun (Master Student, Data Science) Undergraduate Students Advisees: 26 students

SERVICE-RELATED ACTIVITIES

PROFESSIONAL SOCIETY MEMBERSHIPS AND OFFICES

1. Elected Member, International Statistical Institute (ISI)
2. Permanent Member, International Chinese Statistical Association (ICSA)
3. Member, American Statistical Association (ASA)
4. Member, Institute of Mathematical Statistics (IMS)

EDITORIAL, CONFERENCE ORGANIZATION AND REFEREE SERVICES

1. Associate Editor, Statistica Sinica 2017 - present
2. Associate Editor, Statistics and Its Interface 2013 - present
3. Associate Editor for Special Issue on “Financial Engineering and Risk Management” of Statistics and Its Interface.
4. Ad Hoc Book Chapter Reviewer for edited volume Economic Time Series: Modeling and Seasonality, Chapman & Hall/CRC Press. Conference Organization

SERVICE TO PROFESSION

1. Manage and review manuscripts for journals
2. Grant reviewer for NSF and HKG
3. Organize and chair special sessions in international conferences/workshops
4. Panel for career development for Research Experience for Undergraduate students

UNIVERSITY SERVICE

University of Central Florida, College of Nursing

UNIVERSITY COMMITTEES

Date	Committee	Role
2025-present	AI for All Initiative	College Liaison

COLLEGE COMMITTEES

Date	Committee	Role
2025-present	AI Ad Hoc Committee	Chairperson
2020-present	PhD Curriculum & APG Committee	Member
2018-present	Hiring Search Committee	Member

Worcester Polytechnic Institute, School of Arts & Sciences

Date	Committee	Role
2022-2024	WPI Math Department	Associate Department Head
2019-2024	WPI Center for Industrial Mathematics and Statistics	Associate Director
2014-2024	WPI Data Science Undergraduate Program Committee	Member
2014-2024	WPI Math Department Graduate Program Committee	Member
2014-2024	WPI Data Science Hiring Committee	Member
2014-2024	WPI Math Department Undergraduate Committee	Member
2014-2024	WPI Data Science Steering Committee	Member

2014-2024	WPI Data Science Curriculum Committee	Member
2014-2024	WPI Bioinformatics & Computational Biology Steering Committee	Member
2014-2024	WPI Math Department Hiring Committee	Member
2014-2024	WPI Center for Industrial Mathematics and Statistics	Member
2014-2024	WPI Math Department general comprehensive examination (GCE) in Probability and Mathematical Statistics	Designer and Grader
2014-2024	WPI Math Department Statistics Seminar	Organizer and Chair
2018-2024	Faculty Mentor for Assistant Professor Qingshuo Song	Faculty Mentor
2018-2024	Faculty Mentor for Assistant Professor Fangfang Wang	Faculty Mentor
2018-2024	Faculty Mentor for Assistant Teaching Professor Buddika Peiris	Faculty Mentor
2018-2019	Graduate School Panel	Faculty Mentor
2014-2024	Graduate Research Innovation Exchange (GRIE)	Faculty Judge