

LILY WANG

Address: Department of Statistics
3218 Snedecor Hall
Iowa State University
Ames, IA 50011, USA

Email: lilywang@iastate.edu
Phone (O): (515)294-2617
Personal Webpage:
<https://faculty.sites.iastate.edu/lilywang>

ACADEMIC HISTORY

Education

- Ph.D. & M.S. in Statistics, Michigan State University, MI 2007
- M.S. in Mathematics, Tongji University, Shanghai, China 2003
- B.E. in Economics, Tongji University, Shanghai, China 2000

Academic Positions Held

- Professor, Statistics, Iowa State University 2020–
- Associate Professor, Statistics, Iowa State University 2014–2020
- Adjunct Associate Professor, Statistics, University of Georgia 2014–2016
- Associate Professor, Statistics, University of Georgia 2013–2014
- Assistant Professor, Statistics, University of Georgia 2007–2013

Other Professional Experience

- Financial Economist, US Securities and Exchange Commission 2019–2020
Washington, DC
- ASA/NSF/BLS Senior Research Fellow, US Bureau of Labor Statistics 2010–2011
Washington, DC
- Visiting Scholar, US Census Bureau, Washington, DC Summer 2010

Grants, Honors and Awards

- Elected Fellow, American Statistical Association (ASA) 2021–
- COVID-19 Exceptional Effort Research Impact Award, Iowa State University 2021
- Elected Fellow, Institute of Mathematical Statistics (IMS) 2020–
- Elected Member, International Statistical Institute (ISI) 2008–
- National Science Foundation (NSF) Rapid Award (co PI) 2020–2021
- COVID-19 U.S. Dashboard (Featured on the *Amstat News*, June 2020) 2020
- US Securities and Exchange Commission (SEC) Award (sole PI) 2019–2020
- National Science Foundation (NSF) Award (sole PI) 2019–2022
- National Science Foundation (NSF) Award (sole PI) 2015–2018
- National Science Foundation (NSF) Award (co PI) 2014–2018
- M. G. Michael Award, University of Georgia 2012–2013
- Teaching Academy Fellow, University of Georgia 2011–2012
- Invited Poster Presentation (Featured on the *Amstat News*, July 2012) 2012
18th Coalition for National Science Funding Exhibition & Reception on Capitol Hill

- National Science Foundation (NSF) Award (co PI) 2011–2015
- ASA/NSF/BLS Senior Research Fellowship 2010–2011
- Travel Award, SAMSI Workshop on Analysis of Object Data 2010
- National Science Foundation (NSF) Award (sole PI) 2009–2013
- Travel Award, IMS Young Researcher Conference 2009
- Young Researcher Award, UFL 11th Annual Winter Workshop 2009
- Travel Award, NISS/ASA Writing Workshop held in Denver, Colorado AUG 2008
- Chinese Government Award for Outstanding Students Abroad 2007
- Dissertation Completion Fellowship, Michigan State University 2007
- Graduate School Fellowship, Michigan State University SUMMER 2006
- Laha Award, Institute of Mathematical Statistics 2006
- Graduate School Fellowship, Michigan State University 2006
- Laha Award, Institute of Mathematical Statistics 2006
- Young Researcher Fellowship, UFL 8th Annual Winter Workshop 2006
- NSF Travel Support, NISS/SAMSI Workshop 2005
- Teaching Fellowship, Michigan State University SPRING 2005

SCHOLARLY ACTIVITIES

Research Interests

- Statistical Machine Learning & Data Science
- Non-/Semi- parametric Regression Methods
- Financial Econometrics
- Survey Sampling
- Imaging/Spatial-temporal Data Analysis
- High Dimension Data Analysis
- Longitudinal/Functional Data Analysis

Publications

- Refereed Journal Publications [* indicates a student who I am advising or have advised]
- [1] Wang, G.*, Gu, Z.*, Li, X.*, Yu, S.*, Kim, M.*, Wang, Y.*, Gao, L. and **Wang, L.** (2021). Comparing and integrating US COVID-19 data from multiple sources: a county-level dataset with local features. *Journal of Applied Statistics*. Accepted.
 - [2] Kim, M.*, Gu, Z.*, Yu, S.*, Wang, G.* and **Wang, L.** (2021). Methods, challenges, and practical issues of COVID-19 projection: a data science perspective. *Journal of Data Science*. Accepted.
 - [3] Yu, S.*, Wang, Y.*, **Wang, L.** and Gao, L. (2021+). Spatiotemporal autoregressive partially linear varying coefficient models. *Statistica Sinica*. Accepted.
 - [4] **Wang, L.**, Wang, G.*, Li, X.*, Yu, S.*, Kim, M.*, Wang, Y.*, Gu, Z.* and Gao, L. (2021). Modeling and forecasting COVID-19. *AMS: Notices Of The American Mathematical Society*, 68, 585–595.

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- [5] Kim, M.*, **Wang, L.** and Zhou, Y. (2021) Spatially varying coefficient models with sign preservation of the coefficient functions. *Journal of Agricultural, Biological and Environmental Statistics*. Forthcoming.
- [6] Yu, S.*, Wang, G.* and **Wang, L.** (2021). Discussion of “Evaluate the risk of resumption of business for the states of New York, New Jersey and Connecticut via a pre-symptomatic and asymptomatic transmission model of COVID-19”. *Journal of Data Science*. Forthcoming.
- [7] Li, X.*, **Wang, L.** and Wang, H. (2021+). Sparse learning and structure identification for ultra-high-dimensional image-on-scalar regression. *Journal of the American Statistical Association, Theory and Methods*. In press.
- [8] Yu, S.*, Wang, G.*, **Wang, L.**, and Yang, L. (2021). Multivariate spline estimation and inference for image-on-scalar regression. *Statistica Sinica*, 31, 1–25. [An early version was selected as one of three runners-up of the 2019 ASA Statistics in Imaging Section Student Paper Competition]
- [9] Kim, M.* and **Wang, L.** (2021). Generalized spatially varying coefficient models. *Journal of Computational and Graphical Statistics*, 30, 1–10.
- [10] Klinedinst, B.S., Le, S.T., Larsen, B., Pappas, C., Hoth, N.J., Pollpeter, A., Wang, Q., Wang, Y.*, Yu, S.*, **Wang, L.**, Allenspach, K., Mochel, J.P., Bennett, D.A. and Willette, A.A. (2020). Genetic factors of Alzheimer’s disease modulate how diet is associated with long-term cognitive trajectories: A UK Biobank Study. *Journal of Alzheimer’s Disease*, 78, 1245–1257.
- [11] Mu, J.*, Wang, G.* and **Wang, L.** (2020). Efficient estimation and model identification for spatially varying coefficient autoregressive models. *Journal of Nonparametric Statistics*, 32, 428–451.
- [12] Cao, G., Wang, S. **Wang, L.** (2020). Estimation and inference for functional linear regression models with partially varying regression coefficients. *Stat*, 9, e286.
- [13] Klinedinst, B.S., Meierc, N.F., Larsen, B., Wang, Y.*, Yu, S.*, Mochel, J.P., Scott, L., Wolff, T., Pollpeter, A., Pappas, C., Wang, Q., Allenspach, K., **Wang, L.**, Russell, D., Bennett, D.A., Willette, A.A. (2020). Walking in the light: How history of physical activity, sunlight, and vitamin D account for body fat – a UK Biobank study. *Obesity*, 28, 1428–1437.
- [14] Wang, J., Cao, G., **Wang, L.** and Yang, L. (2020). Simultaneous confidence band for stationary covariance function of dense functional data. *Journal of Multivariate Analysis*, 176.
- [15] Wang, Y.*, Wang, G.*, **Wang, L.** and Ogden, T. (2020). Simultaneous confidence corridors for mean functions in functional data analysis of imaging data. *Biometrics*, 76, 427–437.
- [16] Yu, S.*, Wang, G.*, **Wang, L.**, Liu, C.* and Yang, L. (2020). Estimation and inference for generalized geoadditive models. *Journal of the American Statistical Association, Theory and Methods*, 115, 761–774.
- [17] **Wang, L.**, Wang, G.*, Lai, M. J. and Gao, L. (2020). Efficient estimation of partially linear models for data on complicated domains via bivariate penalized splines over triangulations. *Statistica Sinica*, 76, 427–437.
- [18] Klinedinst, B., Pappas, C., Le, S., Yu, S.*, Wang, Q., **Wang, L.**, Allenspach, K., Mochel, J. and Willette, A. (2019). Aging-related changes in fluid intelligence, muscle and adipose mass, and sex-specific immunologic mediation: a longitudinal UK

- Biobank study. *Brain, Behavior, and Immunity*, 82, 396–405. [**Journal Impact Factor: 6.170**]
- [19] Li, X.*, **Wang, L.** and Nettleton, D. (2019a). Additive partially linear models for ultra-high-dimensional regression. *Stat*, 8(1), e223.
- [20] Li, X.*, **Wang, L.** and Nettleton, D. (2019b). Sparse model identification and learning for ultra-high-dimensional additive partially linear models. *Journal of Multivariate Analysis*, 173, 204–228.
- [21] Song, X., **Wang, L.**, Ma, S. and Huang, H. (2019). Variable selection for partially linear proportional hazards model with covariate measurement error. *Journal of Nonparametric Statistics*, 31(1), 196–220.
- [22] Datta, G. S., Delaigle, A., Hall, P. and **Wang, L.** (2018). Semi-parametric prediction intervals in small areas when auxiliary data are measured with error. *Statistica Sinica*, 28, 2309–2335.
- [23] Cao, G. and **Wang, L.** (2018). Simultaneous inference for the mean of repeated functional data. *Journal of Multivariate Analysis*, 165, 279–295.
- [24] Mu, J.*, Wang, G.* and **Wang, L.** (2018). Estimation and inference in spatially varying coefficient models. *Environmetrics*. 29:e2485. [**Environmetrics’s top 20 most downloaded recent papers**]
- [25] **Wang, L.** and Cao, G. (2018). Polynomial spline estimation for generalized partially linear single-index models. *Bernoulli*, 24(2), 1101–1127.
- [26] Yin, S., Zhu, Z., **Wang, L.**, Liu, B., Xie, Y., Wang, G.* and Li, Y. (2018). Regional soil erosion assessment based on sample survey and geostatistics. *Hydrology and Earth System Sciences*, 22, 1695–1712. [**5-year journal Impact Factor: 4.819**]
- [27] Song, X. and **Wang, L.** (2017). Partially time-varying coefficient proportional hazards models with error prone time-dependent covariates: an application to the AIDS Clinical Trials Group 175 Data. *The Annals of Applied Statistics*, 11(1), 274–296.
- [28] Cao, G., **Wang, L.**, Li, Y. and Yang, L. (2016). Oracle-efficient confidence envelopes for covariance functions in dense functional data. *Statistica Sinica*, 26, 359–383.
- [29] Wang, G.* and **Wang, L.** (2015). Spline estimation and variable selection for single-index prediction models with diverging number of index parameters. *Journal of Statistical Planning and Inference*, 162, 1–19.
- [30] Gu, L., **Wang, L.**, Härdle, W. and Yang, L. (2014). Simultaneous confidence corridor for varying coefficient regression with sparse functional data. *Test*, 23, 806–843.
- [31] **Wang, L.**, Wang, S. and Wang, G.* (2014). Variable selection and estimation for longitudinal survey data. *Journal of Multivariate Analysis*, 130, 409–424.
- [32] **Wang, L.**, Xue, L., Qu, A. and Liang, H. (2014). Estimation and model selection in generalized additive partial linear models for correlated data with diverging number of covariates. *The Annals of Statistics*, 42(2), 592–624.
- [33] Lai, M. J. and **Wang, L.** (2013). Penalized bivariate splines for regression. *Statistica Sinica*, 23(3), 1399–1417.
- [34] Ma, S., Song, Q. and **Wang, L.** (2013). Simultaneous variable selection and estimation in semiparametric modeling of longitudinal/clustered data. *Bernoulli*, 19(1), 252–274.

- [35] Cao, G., Wang, J., **Wang, L.** and Todem, D. (2012). Spline confidence bands for functional derivatives. *Journal of Statistical Planning and Inference*, 142(6), 1557–1570.
- [36] **Wang, L.**, Feng, C.*, Song, Q. and Yang, L. (2012). Efficient semiparametric GARCH modeling of financial volatility. *Statistica Sinica*, 22(1), 249–270.
- [37] **Wang, L.**, Liu, X., Liang, H. and Carroll, R. J. (2011). Estimation and variable selection for generalized additive partial linear models. *The Annals of Statistics*, 39(4), 1827–1851.
- [38] **Wang, L.** and Wang, S. (2011). Nonparametric additive model-assisted estimation for survey data. *Journal of Multivariate Analysis*, 102(7), 1126–1140.
- [39] **Wang, L.** (2011). A nonparametric analysis on the environmental Kuznets curve. *Environmetrics*, 22(3), 420–430.
- [40] Liu, X., **Wang, L.** and Liang, H. (2011). Estimation and variable selection for semi-parametric additive partial linear model. *Statistica Sinica*, 21(3), 1225–1248.
- [41] Gao, L. and **Wang, L.** (2011). Security price responses to unexpected earnings: a nonparametric investigation. *Statistical Methods and Applications*, 20(2), 241–258.
- [42] **Wang, L.** and Yang, L. (2010). Simultaneous confidence bands for time series prediction function. *Journal of Nonparametric Statistics*, 22(8), 999–1018.
- [43] **Wang, L.** (2009). Single-index model-assisted estimation in survey sampling. *Journal of Nonparametric Statistics*, 21(4), 487–504.
- [44] **Wang, L.** and Yang, L. (2009). Spline estimation of single-index models. *Statistica Sinica*, 19(2), 765–783.
- [45] Huang, X., **Wang, L.**, Yang, L. and Kravchenko, A. N. (2008). Management effects on relationships of crop yields with wetness index and precipitation. *Agronomy Journal*, 100(5), 1463–1471. **[5-Year Impact Factor: 1.838]**
- [46] **Wang, L.** and Yang, L. (2007). Spline-backfitted kernel smoothing of nonlinear additive autoregression model. *The Annals of Statistics*, 35(6), 2474–2503.
- [47] **Wang, L.** and Liang, H. (2004). Strong uniform convergence for the improved estimator of the regression function under φ -mixing Conditions. *Metrika*, 59(3), 245–261.
- [48] Liang, H. and **Wang, L.** (2001). Convergence rates in the law of large numbers for B-valued random elements. *Acta Mathematica Scientia, Series B*, 21(2), 229–236.

Software Packages and Shiny Apps Developed

- R Packages

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|---|------|
| [1] FDAimage: functional regression methods for imaging data | 2020 |
| https://github.com/funstatpackages/FDAimage | |
| [2] ImageSCC: simultaneous confidence corridors for mean functions of imaging data | 2020 |
| https://github.com/funstatpackages/ImageSCC | |
| [3] TPST: tensor product splines over triangular prism partitions | 2020 |
| https://github.com/funstatpackages/TPST | |
| [4] STARX: Spatiotemporal autoregressive model with exogenous variables | |
| https://github.com/funstatpackages/STARX | |
| [5] SVCM: spatially varying coefficient models | 2020 |
| https://github.com/funstatpackages/SVCM | |

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- [6] CDCAR: COVID-19 data checking and repairing 2020
<https://github.com/covid19-dashboard-us/cdcar>
 - [7] STEM: Spatiotemporal epidemic model 2020
<https://github.com/covid19-dashboard-us/STEM>
 - [8] GgAM: generalized geoaddivitive models 2019
<https://github.com/funstatpackages/GgAM>
 - [9] BPST: Bivariate penalized spline smoothing over triangulation 2019
<https://github.com/funstatpackages/BPST>
 - [10] Triangulation: arbitrary polygonal domain triangulation 2019
<https://github.com/funstatpackages/Triangulation>
 - COVID-19 U.S. Dashboard
 - [1] Wang, L., Wang, G., Gao, L., Li, X., Yu, S., Kim, M. and Wang, Y. (2020). An R shiny app to visualize, track, and predict a7-day infected and death cases of COVID-19 in the United States. <https://covid19.stat.iastate.edu>
 - [2] Wang, L., Wang, G., Gao, L., Li, X., Yu, S., Kim, M., Wang, Y. and Gu, Z. (2020). A Shiny App to predict infected and death cases of COVID-19 in the U.S. for the next four months. <https://covid19.stat.iastate.edu/longtermproj.html>

Grants/Funds Received

- Census Bureau, Principal Investigator Approved
Proposal to Establish a Branch of the Central Plains Research Data Center at Iowa State University
- National Science Foundation 2050264
Co-Principal Investigator (PI: Jane Rongerude: \$60,000) 09/01/2020–08/31/2021
Title: RAPID: Keeping Shelters in Place: Understanding Residential Landlord Decision-making During the COVID-19 Pandemic
- National Science Foundation DMS-1916204
Sole Principal Investigator (\$124,999) 08/01/2019–07/31/2022
Title: Statistical Modelling and Inference for Next-Generation Functional Data
- US Securities and Exchange Commission
Sole Principal Investigator (\$230,686) 09/10/2019–08/31/2020
- National Science Foundation CCF-1934884
Senior Personnel 10/01/2019–09/30/2022
Title: HDR:TRIPODS: D4 (Dependable Data Driven Discovery) Institute
- National Science Foundation DMS-1542332
Sole Principal Investigator (\$99,999) 07/01/2014–07/31/2018
Statistical Inference for Functional Data in Time Series and Survey Sampling: Theory and Methods
- National Science Foundation SES-1357585
Co-Principal Investigator (PI: Robert Belli: \$300,000) 08/01/2014–07/31/2018
Central Plains Census Research Data Center

- National Science Foundation DMS-1106816
Co-Principal Investigator (PI: Xiao Song: \$149,966) 08/01/2011–07/31/2015
Novel nonparametric methods for prognosis studies with missing covariates
- The M. G. Michael Award
Sole Principal Investigator (\$3,000) 07/01/2013–06/30/2014
Quantile regression analysis of data from complex surveys
- National Science Foundation DMS-0905730
Sole Principal Investigator (\$100,200) 07/01/2009–06/30/2013
Nonparametric estimation with applications to large and complex survey data
- Provost Travel Funds 2012
— to attend the Fourth International Conference on Establishment Surveys in Montreal, Canada (\$2,500)
- ASA/NSF/BLS Research Fellowship
Sole Principal investigator (\$77,000) 08/01/2010–08/14/2011
Flexible and robust estimation for complex survey sampling
- Provost Travel Funds, University of Georgia 2012
— to attend the ICES Conference in Montréal, Canada (\$2,500)
- Provost Travel Funds, University of Georgia 2010
— to attend the Joint Statistical Meetings in Vancouver, Canada (\$2,340)
- US Census Bureau, contract 2010
Sole Principal investigator (\$5,000)
- President’s Venture Fund, University of Georgia 2009
— to attend ICSA Applied Statistics Symposium, in San Francisco, CA (\$2,114)

Professional Membership

- **Elected Fellow**, American Statistical Association (ASA) 2021–
- **Elected Fellow**, Institute of Mathematical Statistics (IMS) 2020–
- **Elected Member**, International Statistical Institute (ISI) 2008–
- Member, American Statistical Association (ASA) 2007–
- Member, International Chinese Statistical Association (ICSA) 2007–
- Member, Bernoulli 2015–

Presentations

- Conference Presentations/Talks (*: invited discussant)
 1. ICSA 2020 Applied Statistics Symposium-Houston, DEC 13–16, 2020.
 2. Joint Statistical Meetings[†], AUG 2–6, 2020, Virtual Conference.
 3. The Webinar Series: “Data Science in Action in Response to the Outbreak of COVID-19, May 1, 2020”.
 4. 2019 ICSA China Conference, JUL 1–4, 2019, Tianjin, China.
 5. The 3rd International Conference on Econometrics and Statistics (EcoSta 2019), JUN 25–28, 2019, Taichung, Taiwan.
 6. The 3rd Lilac International Conference on Application of Statistics (LICAS 2019), JUN 23–25, 2019, Harbin, China.

7. Joint Statistical Meetings[†], JUL 28–AUG 2, 2018, Vancouver, BC, Canada.
8. IMS Asia Pacific Rim Meeting (IMS-APRM), JUN 26–29, 2018, Singapore.
9. The 2nd International Conference on Econometrics and Statistics, JUN 19–21, 2018, Hong Kong, China.
10. 2017 International Conference on Data Science, DEC 17–19, 2017, Shanghai, China.
11. The Nonparametric Statistics Workshop: Integration of Theory, Methods and Applications, OCT 6–7, 2016, Ann Arbor, MI.
12. 2016 IISA International Conference on Statistics, AUG 18–21, 2016, Corvallis, OR.
13. Joint Statistical Meetings*, JUL 30–AUG 4, 2016, Chicago, IL.
14. ICSA Applied Statistics Symposium, JUN 12–15, 2016, Atlanta, GA.
15. 15th Approximation Theory conference, MAY 22–25, 2016, San Antonio, TX.
16. Joint conference CFE-CMStatistics, 2015, DEC 11–14, London, UK.
17. ICSA and KISS Joint Applied Statistics Symposium, JUN 15–18, 2014, Portland, OR.
18. Workshop on “Nonparametric Estimation and Functional Data”, JUN 13, 2014, Corvallis, OR.
19. Eastern North American Region Meeting*, MAR 16–19, 2014, Baltimore, MA.
20. The Second Taihu International Statistics Forum, JUL 6–8, 2013, Suzhou, China.
21. Graybill Conference on Modern Survey Statistics, JUN 9–12, 2013, Fort Collins, CO.
22. Eastern North American Region Meeting*, MAR 9–13, 2013, Orlando, FL.
23. The fourth International Conference on Establishment Surveys (ICES-IV), JUN 11–14, 2012, Montréal, Quebec, Canada.
24. Workshop on Biostatistics and Bioinformatics, MAY 4–6, 2012, Atlanta, GA.
25. Eastern North American Region Meeting*, APR 1–4, 2012, Washington, DC.
26. ICSA Applied Statistics Symposium, JUN 26–29, 2011, New York City.
27. SRCOS 2011 Summer Research Conference, JUN 5–8, 2011, McCormick, SC.
28. SAMSI Workshop, SEP 11–15, 2010, Research Triangle Park, NC.
29. Joint Statistical Meetings, JUL 31–AUG 5, 2010, Vancouver, BC, Canada.
30. ICSA Applied Statistics Symposium, JUN 20–23, 2010, Indianapolis, IN.
31. ICSA Applied Statistics Symposium*, JUN 20–23, 2010, Indianapolis, IN.
32. Joint Statistical Meetings*, AUG 2–7, 2009, Washington, DC.
33. Twelfth Meeting of New Researchers in Statistics and Probability, JUL 28–31, 2009, Baltimore, MD.
34. ICSA Applied Statistics Symposium, JUN 21–24, 2009, San Francisco, CA.
35. Symposium on New Directions in Asymptotic Statistics, MAY 15–16, 2009, Athens, GA.
36. Joint Statistical Meetings, AUG 2–7, 2008, Denver, CO.
37. Joint Statistical Meetings, AUG 6–10, 2006, Seattle, WA.
38. The 69th IMS Annual Meeting, JUL 30–AUG 4, 2006, Rio de Janeiro, Brazil.
39. ICSA Applied Statistics Symposium, JUN 14–17, 2006, Storrs, CT.
40. The 38th Symposium of the Interface of Statistics, Computer Science and Applications, MAY 24–27, 2006, Pasadena, CA.

- Invited Colloquium/Seminar Talks
 1. Department of Mathematics and Statistics, University of North Carolina at Greensboro
March 12, 2021
 2. Department of Biostatistics, University of Nebraska Medical Center DEC 4, 2020
 3. Department of Mathematics and Statistics, University of Toledo NOV 20, 2020
 4. Department of Statistics, George Washington University NOV 6, 2020
 5. Department of Mathematical Sciences, Michigan Technological University OCT 30, 2020
 6. Department of Mathematical and Statistical Sciences, University of Alberta OCT 28, 2020
 7. Baker Center Seminar Series, Iowa State University OCT 27, 2020
 8. Joint Research Data Center Seminar Series, Central University of Finance and Economics & University of Electronic Science and Technology of China, JUL 15, 2020
 9. Pod of Asclepius, JUN 19, 2020.
 10. TADS Lunch-n-learn Seminar Series, Iowa State University JUN 11, 2020
 11. Securities and Exchange Commission Data Science Seminar Series, May 13, 2020.
 12. Department of Mathematical Sciences, IUPUI OCT 18, 2019
 13. Department of Statistics, Iowa State University SEP 30, 2019
 14. Department of Mathematics, College of William & Mary APR 13, 2019
 15. Department of Statistics, Iowa State University SEP 24, 2018
 16. Shandong University, China, DEC 14, 2017
 17. University of International Business and Economics, China, DEC 13, 2017
 18. Tsinghua University, China, DEC 12, 2017
 19. ISU Big Data seminar series, Iowa State University APR 3, 2017
 20. CSSM seminar series, Department of Statistics, Iowa State University DEC 2, 2016
 21. College of Public Health, University of Iowa OCT 22, 2015
 22. Iowa Social Science Research Center, University of Iowa APR 29, 2015
 23. ISU Big Data seminar series, Iowa State University APR 24, 2015
 24. ISU Big Data seminar series, Iowa State University DEC 3, 2014
 25. CSSM seminar series, Department of Statistics, Iowa State OCT 24, 2014
 26. Department of Mathematical Sciences, University of Texas at Dallas MAR 28, 2014
 27. Department of Statistics, Iowa State University FEB 12, 2014
 28. Department of Mathematics and Statistics, Auburn University NOV 8, 2013
 29. Department of Applied Math, Tongji University JUN 24, 2013
 30. Department of Statistics, University of Georgia JAN 8, 2013
 31. Department of Statistics, University of Georgia FEB 15, 2012
 32. US Bureau of Labor Statistics, Washington, DC JUL 14, 2011
 33. US Bureau of Labor Statistics, Washington, DC MAR 3, 2011
 34. Department of Statistics, Purdue University JAN 28, 2011
 35. Department of Statistics, Oregon State University JAN 24, 2011

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| 36. Department of Math, Stat & Computer Science, UIC | NOV 23, 2010 |
| 37. Department of Mathematics, University of Georgia | OCT 12, 2010 |
| 38. US Census Bureau, Washington, DC | JUL 12–16, 2010 |
| 39. Department of Biostatistics and Bioinformatics, Emory | JAN 29, 2009 |
| 40. Department of Mathematical Sciences, Clemson University | OCT 30, 2008 |
| 41. Department of Mathematics, Georgia Institute of Technology | OCT 29, 2008 |
| 42. Department of Statistics, University of Georgia | OCT 28, 2008 |
| 43. Department of Statistics, University of Georgia | SEP 18, 2007 |
| 44. Computational Systems Biology Lab, University of Georgia | AUG 30, 2007 |
| 45. Department of Mathematics, College of William and Mary | FEB 17–19, 2007 |
| 46. School of Industrial & Systems Engineering, Georgia Tech | FEB 14–16, 2007 |
| 47. Department of Statistics, George Washington University | FEB 11–13, 2007 |
| 48. Department of Statistics, Penn State University | FEB 7–9, 2007 |
| 49. Department of Statistics, University of Georgia | FEB 4–6, 2007 |
| 50. Department of Statistics, Colorado State University | JAN 28–30, 2007 |
| 51. Department of Statistics, Indiana University | JAN 25–27, 2007 |
| 52. Department of Mathematics, University of Kansas | JAN 21–23, 2007 |
| 53. Department of Math & Stat, California State, Long Beach | JAN 11–13, 2007 |
| 54. Department of Management Science, University of Miami | DEC 10–11, 2006 |
| 55. Department of Statistics & Probability, Michigan State | OCT 24, 2006 |
| 56. Department of Statistics, Texas A&M University | OCT 5, 2006 |
- Conference Poster Presentations
 1. Coalition for National Science Funding Exhibition & Reception on Capitol Hill, MAY 15, 2012, Washington, DC. [*Prominently featured on the Amstat News, July 2012*]
 2. University of Florida Winter Workshop, JAN 8–10, 2009, Gainesville, FL.
 3. University of Florida Winter Workshop, JAN 14–16, 2006, Gainesville, FL.
 4. NISS/SAMSI workshop on Financial Mathematics, Statistics and Econometrics, SEP 18–21, 2005, RTP, NC.
 - Conference/Workshop Attendance
 1. NISS/SAMSI Cell Suppression Workshop, MAY 14, 2012, Washington, DC.
 2. 2012 Academic Affairs Faculty Symposium, MAR 23–24, 2012, Unicoi, GA.
 3. SRCOS 2009 SUMMER Research Conference, JUN 7–10, Jekyll Island, GA.
 4. Proposal Writing Workshop: Write Winning Grants, JUN 17–18, 2009, Athens, GA.
 5. SUMMER school on “Multivariate Splines and Their Applications”, MAY 11–22, 2009, Athens, GA.
 6. NISS/ASA Writing Workshop, AUG 3–6, 2008, Denver, CO.

TEACHING EXPERIENCE

Courses Taught @ Iowa State University

- STAT 507X Statistical Learning of Infectious Disease Data Analysis SPRING 2021
- STAT 486/586 Introduction to Statistical Computing SPRING 2021
- STAT 542 Theory of Probability and Statistics I FALL 2020
- STAT 480 Statistical Computing Applications SPRING 2019
- STAT 542 Theory of Probability and Statistics I FALL 2018
- STAT 551 Times Series Analysis FALL 2017
- STAT 480 Statistical Computing Applications SPRING 2017
- STAT 551 Times Series Analysis FALL 2016
- STAT 480 Statistical Computing Applications SPRING 2016
- STAT 401-B Statistical Methods for Research Workers SPRING 2015
- STAT 551 Times Series Analysis FALL 2014

Course Development @ University of Georgia

- STAT 6210 Introduction to Statistical Methods I FALL 2012
- STAT 8920 Statistical Research & Professional Practice I FALL 2010
- STAT 6360 Statistical Software Programming SPRING 2010

Courses Taught @ University of Georgia

- STAT 4/6290 Non-parametric Statistics SPRING 2014, 2010, 2009
- STAT 5020 Capstone Course II SPRING 2014
- STAT 4/6240 Sampling and Survey Methods FALL 2013, 2012, 2011
- STAT 5010 Capstone Course I FALL 2013
- STAT 4/6360 Statistical Software Programming SPRING 2013, 2012
- STAT 8910 Graduate Student Seminar FALL 2011, 2008
- STAT 8920 Statistical Research & Professional Practice I FALL 2011, 2010
- STAT 6360 Introduction to SAS and R SPRING 2010
- STAT 6210 Introduction to Statistical Methods I FALL 2012, 2010, 2009, 2008, 2007

Courses Taught @ Michigan State University

- STT 430 Introduction to Probability and Statistics SUMMER 2007
- STT 200 Statistical Methods SUMMER 2004, 2005

SUPERVISION OF STUDENT RESEARCH

- Major Advisor/Co-Advisor for PhD students @ Iowa State University
 - Kunal Das current
 - Zhiling Gu current
 - Sooran Kim current
 - Lin Quan current
 - Yueying Wang (co-advising with Zhengyuan Zhu) 2021 (expected)
 - Myungjin Kim 2021 (expected)

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- Shan Yu (co-advising with Dan Nettleton) 2020
 - * Dissertation Title: “Model Estimation, Identification and Inference for Next-generation Functional Data and Spatial Data”
 - * First job: Tenure-track Assistant Professor at the University of Virginia (2020–)
 - Rodrigo Plazola-Ortiz (co-advising with Yehua Li) 2020
 - * Dissertation Title: “Interaction Forward Selection in Ultra-high-dimensional Functional Linear Models”
 - * First job: Biostatistician, Boehringer Ingelheim (2020–)
 - Jingru Mu 2019
 - * Dissertation Title: “Spatially Varying Coefficient Models: Theory and Methods”
 - * First job: Tenure-track Assistant Professor at Kansas State University (2019–)
 - Jue Wang (co-advising with Steven Hou, Math) 2019
 - * Dissertation Title: “Studies on Semiparametric Spatial Regression Models”
 - * First job: Model Analyst at JP Morgan Chase
 - Xinyi Li 2018
 - * Dissertation: “Non/Semi-parametric Learning from Data with Complex Features”
 - * First job: Postdoc fellow at SAMSI (Tenure-track Assistant Professor at Clemson University, 2020–)
 - Chenhui Liu (co-advising with Anuj Sharma, Civil Engineering) 2018
 - * Dissertation: “Three Essays on Crash Frequency Analysis”
 - * First job: Research Associate at FHWA
 - Major Advisor/Co-Advisor for PhD students @ University of Georgia
 - Guannan Wang 2015
 - * Dissertation: “High/Ultra-High Dimensional Single-Index Models”
 - * First job: Assistant Professor at College of William & Mary (2015–)
 - Cong Feng 2012
 - * Dissertation: “Nonparametric Analysis of Complex Time Series”
 - * First job: Statistician at Capital One
 - Major Advisor for MS students @ Iowa State University
 - Yue Zhang 2019
 - Shan Yu 2018
 - Major Advisor for MS students @ University of Georgia
 - Xinyi Li 2012
 - Siyan Hu 2011
 - POS Committee Member for Iowa State University PhD students
 - Current
 - Peiyu Cao, Pranamesh Chakraborty, Haoyan Hu, Hyeongseon Jeon, Brandon Klinedinst, Dongjin Li, Jiayi Luo, Sepideh Mosafari, Jiaming Qiu, Run Wang.
 - Completed
 - Guillermo Basulto-Elias (2016), Ran Bi (2018), Xinyue Chang (2020), Bokan Chen (2016), Brenna Curley (2017), Natalia Da Silva (2017), Fan Dai (2020), Danhyang Lee

(2019), Zhixia Ma (2016), Seho Park (2018), Daniel Ries (2018), Didem Sari (2017), Qianqian Shan (2020), Fei Song (2018), Kimberly Vanous (2018), Zhenzhong Wang (2020), Zhonglei Wang (2018), Yuhang Xu (2016), Leilei Zhang (2015), Haozhe Zhang (2019), Wei Zhang (2016).

- Advisory Committee Member for University of Georgia PhD students
Sandra Addo (2014), Haileab Tesfe Hilafu (2014), Hejiao Hu (2014), Adam Jaeger (2015), Xinyu Liu (2013), Debin Qiu (2016), Wenhui Sheng (2015), Jin Tang (2013), Wenbo Wu (2015), Kun Xu (2012), Yuan Xue (2013), Amy Vaughan (2009).
- Advisory Committee Member for MS students @ Iowa State University
Fan Dai (2019), Sisi Hu (2016), Wei Hu (2017), Xiangzhen Li (2017), Rosy Oh (2016), Dinesh Poddaturi (2018), Qinglong Tian (2019), Xiaofei Zhang (2018).
- Advisory Committee Member for MS students @ University of Georgia
Na Hao (2013), Sebastain Nde Awondo (2014), Mitch Muhlheim (2013), Andrew Anderson (2012), Li Li (2012), Qianqian Tang (2012), Kan Bao (2010), Nathan Lekahal (2009).

UNDERGRADUATE ADVISING

- Undergraduate students @ Iowa State University
 - Current: 20 advisees

SERVICES

Service to Governmental Agencies

- Visiting Scholar, US Securities and Exchange Commission 2019–2020
- ASA/NSF/BLS Senior Research Fellow, US Bureau of Labor Statistics 2010–2011
- Visiting Scholar, US Census Bureau Summer 2010

Service to Iowa State University

- Faculty Representative, ISU Branch of the Central Plains Research Data Center 2016–
- Member of Search Committee, Director of Data Driven Science 2016

Service to The Department @ Iowa State University

- Member of Advisory Committee on Promotion and Tenure 2020–2021
- Member of PhD and MS Exam Committee 2020–2021
- Member of Search Committee 2018–2019
- Member of Admission Committee 2018–2019
- Member of Curriculum Committee 2018–2019
- Member of Department Enhancement Project Committee 2017–2018
- Member of Undergraduate Committee 2017–2019
- Member of Computation Advisory Committee 2015–2018
- Member of Advisory Committee to the Chair 2014–2017
- Co-Chair of Seminar Committee 2014–2015

- Member of Search Committees 2014–2015

Service to The Department @ University of Georgia

- Member of Graduate Committee 2008–2009, 2011–2014
- Co-Chair of Colloquium Committee 2008–2009, 2011–2012, 2013–2014
- Member of Undergraduate Committee 2010–2011, 2012–2013
- Member of Mentoring Committee 2010–2013
- Member of Research Development Committee 2009–2010
- Member of Computing Committee 2007–2008

Editorship or Editorial Board Member

- **Associate Editor** for Journal of the Royal Statistical Society: Series B 2020–
- **Associate Editor** for Journal of Nonparametric Statistics 2019–
- **Associate Editor** for Statistical Analysis and Data Mining 2018–
- **Guest Associate Editor** for Statistica Sinica 2016–2018
(special issue on “Data Not Missing At Random”)
- **Co-editor** for Sankhya Series B 2012–2016

Journal Referee Services (more than 120 articles)

- Annals of Management Science
- Annals of Applied Statistics
- Annals of Statistics
- Bernoulli
- Biometrics
- Biometrical Journal
- Canadian Journal of Statistics
- Communications in Statistics
- Computational Statistics and Data Analysis
- Electronic Journal of Statistics
- International Journal of Environmental Studies
- Journal of American Statistical Association
- Journal of Applied Statistics
- Journal of Business and Economic Statistics
- Journal of Computational and Graphical Statistics
- Journal of Data Science
- Journal of the Royal Statistical Society: Series B
- Journal of the Korean Statistical Society
- Journal of Nonparametric Statistics
- Journal of Multivariate Analysis
- Journal of Probability and Statistics
- Journal of Statistical Planning and Inference
- Sankhya B
- Science
- Science Advances
- Statistica Sinica
- Statistical Analysis and Data Mining
- Statistics and Computing
- Statistics and Its Interface
- Statistics in Medicine
- Statistics & Probability Letters
- Survey Methodology
- The American Statistician

Grant Reviews

- Panel Reviewer, National Science Foundation 2020
- Proposal Reviewer, National Security Agency 2016
- Proposal Reviewer, Iowa State University 2015
- Panel Reviewer, National Science Foundation 2014

- Proposal Reviewer, National Security Agency 2014
- Proposal Reviewer, National Security Agency 2012
- Proposal Reviewer, University of Toledo Internal Grants 2011
- Proposal Reviewer, National Security Agency 2010

Evaluating Colleagues

- Applying for Full Professorship with Tenure (1) 2020
- Applying for Associate Professorship with Tenure (1) 2020
- Applying for Associate Professorship with Tenure (2) 2016

Other Professional Services

- Member (ASA representative) of the organizing committee, *COPSS-NISS COVID-19 Data Science Virtual Seminar Series* 2021
- Invited Session Organizer and Chair, *2021 Joint Statistical Meetings* 2021
- Member of the program committee of the *2021 ICSA Applied Statistics Symposium* 2021
- Invited Session Organizer, *2019 ICSA China conference, Nankai University, China* 2019
- Invited Session Organizer, *the 2nd International Conference on Econometrics and Statistics* 2018
- Workshop Organizer, *Central Plains Research Data Center: Opportunities for researchers using restricted access data* 2017
- Invited Session Organizer, *the 1st International Conference on Econometrics and Statistics* 2017
- Invited Session Organizer, *2017 ICSA Symposium* 2017
- Invited Session Organizer, *2015 Joint ICSA Symposium and Graybill Conference* 2015
- Invited Session Organizer, *International Workshop on*
— “Non- and Semiparametric Volatility and Correlation Models” 2014
- Invited Session Organizer, *2014 Eastern North American Region Meeting* 2014
- Invited Session Organizer, *2013 ICSA and ISBS Joint Statistical Conference* 2013
- Topic Contributed Session Organizer, *2013 Joint Statistical Meetings* 2013
- Invited participant, *2012 Coalition for NSF Exhibition and Reception* 2012
- Invited Session Organizer and Chair, *2012 Joint Statistical Meetings* 2012
- Contributed Session Chair, *2012 Eastern North American Region Meeting* 2012
- Committee Member, *2012 ASA Nonparametric Student Paper Competition* 2012
- Contributed Session Chair, *2012 Joint Statistical Meetings* 2012
- Invited Session Chair, *2011 ICSA Applied Statistics Symposium* 2011
- Invited Session Organizer, *2010 ICSA Applied Statistics Symposium* 2010
- Invited Session Chair, *2009 ICSA Applied Statistics Symposium* 2009
- Local Committee Member/Invited Session Chair
Symposium on New Directions in Asymptotic Statistics 2009