Lexin Li

CONTACT

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RESEARCH INTERESTS

▷ Neuroimaging data analysis: brain connectivity analysis, imaging causal inference, imaging genetics, longitudinal imaging analysis, multimodal neuroimaging analysis, tensor analysis
▷ Deep brain stimulation, brain-computer-interface
▷ Statistical machine learning, deep learning, reinforcement learning
▷ Dimension reduction, variable selection, high dimensional regressions
▷ Ordinary differential equations, point process, functional data analysis

EDUCATION

▷ Ph.D. Statistics.   University of Minnesota, Twin Cities   2003
▷ M.S. Statistics.   University of Minnesota, Twin Cities   2002
▷ B.E. Electrical Engineering.   Zhejiang University, China   1998

POSITIONS

▷ Professor   Department of Biostatistics & Helen Wills Neuroscience Institute
University of California, Berkeley
2018 - present

▷ Associate Professor   Department of Biostatistics, University of California, Berkeley
2014 - 2018

▷ Visiting Associate Professor   Department of Statistics, Stanford University
2012 - 2013

▷ Visiting Associate Professor   Yahoo! Research Labs
2011 - 2012

▷ Associate Professor   Department of Statistics, North Carolina State University
2011 - 2014

▷ Assistant Professor   Department of Statistics, North Carolina State University
2005 - 2011

▷ Post-Doctoral Scholar   School of Medicine, University of California, Davis
2003 - 2005

HONORS

- ▷ Fellow, American Statistical Association (ASA)   2017
- ▷ Fellow, Institute of Mathematical Statistics (IMS)   2021
- ▷ Elected Member, International Statistical Institute (ISI)   2021

PUBLICATIONS

▶ **Articles in Peer Reviewed Journals**

[1] Shi, C., Zhou, Y., and **Li, L.** (2024+). Testing directed acyclic graph via structural, supervised and generative adversarial learning. *Journal of the American Statistical Association*, accepted.

[2] Lee, K.Y.,**Li, L.**, and Li, B. (2024+). Functional directed acyclic graphs. *Journal of Machine Learning Research*, accepted.

[3] Lyu, X., Kang, J., and **Li, L.** (2024+). High-dimensional multi-subject time series transition matrix inference with application to brain connectivity analysis. *Biometrics*, accepted.

[4] Jiang, F., Tian, L., Kang, J., and **Li, L.** (2024+). High-dimensional subgroup regression analysis. *Statistica Sinica*, accepted.

[5] Lee, C.E, Zhang, X., and **Li, L.** (2024+). Mean dimension reduction and testing for nonparametric tensor response regression. *Statistica Sinica*, accepted.

[6] Dai, X. and Li, L. (2024). Post-regularization confidence bands for ordinary differential equations. Journal of Machine Learning Research, 25, 1-51.

[7] Zhang, D., **Li, L.**, Sripada, C., and Kang, J. (2023). Image response regression via deep neural networks. *Journal of the Royal Statistical Society, Series B.*, 85, 1589-1614.

[8] Zhou, Y., Shi, C., **Li, L.**, and Yao, Q. (2023). Testing for the Markov property in time series via deep conditional generative learning, *Journal of the Royal Statistical Society, Series B.*, 85, 1204-1222.

[9] Dai, X., Lyu, X., and **Li, L.** (2023). Kernel knockoffs selection for nonparametric additive models. *Journal of the American Statistical Association*, 118, 2158-2170.

[10] **Li, L.**, Zeng, J., and Zhang, X. (2023). Generalized liquid association analysis for multimodal neuroimaging. *Journal of the American Statistical Association*, 118, 1984-1996.

[11] Dai, X. and **Li, L.** (2023). Orthogonalized kernel debiased machine learning for multimodal data analysis. *Journal of the American Statistical Association*, 118, 1796-1810.

[12] Lee, K.Y., **Li, L.**, Li, B., and Zhao, H. (2023). Nonparametric functional graphical modeling through functional additive regression operator. *Journal of the American Statistical Association*, 118, 1718-1732.

[13] Tang, X. and **Li, L.** (2023). Multivariate temporal point process regression. *Journal of the American Statistical Association*, 118, 830-845.

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[14] Zhou, J., Sun, W.W., Zhang, J., and **Li, L.** (2023). Partially observed dynamic tensor response regression. *Journal of the American Statistical Association*, 118, 424-439.

[15] Lee, K.Y., Ji, D., **Li, L.**, Constable, T., and Zhao, H. (2023). Conditional functional graphical models. *Journal of the American Statistical Association*, 118, 257-271.

[16] Zhang, J., Sun, W.W., and **Li, L.** (2023). Generalized connectivity matrix response regression with applications in brain connectivity studies. *Journal of Computational and Graphical Statistics*, 32, 252-262.

[17] Lyu, X., Kang, J., and **Li, L.** (2023). Statistical inference for high-dimensional vector autoregression with measurement error. *Statistica Sinica*, 33, 1435-1459.

[18] Zhou, Y., Shi, C., Qi, Z., and **Li, L.** (2023). Optimizing pessimism in dynamic treatment regimes: a Bayesian learning approach. *Proceedings of Machine Learning Research*, 206, 1-18.

[19] Li, Q., and **Li, L.** (2022). Integrative factor regression and its inference for multimodal data analysis. *Journal of the American Statistical Association*, 117, 2207-2221.

[20] Shi, C., and **Li, L.** (2022). Testing mediation effects using logic of Boolean matrices. *Journal of the American Statistical Association*, 117, 2014-2027.

[21] Dai, X., and **Li, L.** (2022). Kernel ordinary differential equations. *Journal of the American Statistical Association*, 117, 1711-1725.

[22] Lee, K.Y., and **Li, L.** (2022). Functional structural equation model. *Journal of the Royal Statistical Society, Series B.*, 84, 600-629.

[23] Lee, K.Y. and **Li, L.** (2022). Functional sufficient dimension reduction through average Frechet derivatives. *The Annals of Statistics*, 50, 904–929.

[24] **Li, L.**, Shi, C., Guo, T., and Jagust, W.J. (2022). Sequential pathway inference for multimodal neuroimaging analysis. *Stat*, 11:e433.

[25] Liu, Y., **Li, L.**, and Wang, X. (2022). A nonlinear sparse neural ordinary differential equation model for multiple functional processes. *The Canadian Journal of Statistics*, 50, 59-85.

[26] Luo, L. and **Li, L.** (2022). Online two-way estimation and inference via linear mixed-effects models. *Statistics in Medicine*, 41, 5113–5133.

[27] Xia, Y., and **Li, L.** (2022). Hypothesis testing for network data with power enhancement. *Statistica Sinica*, 32, 293-321.

[28] Virta, J., Lee, K.Y., and **Li, L.** (2022). Sliced inverse regression in metric spaces. *Statistica Sinica*, 32, 2315-2337.

[29] Zhao, Y., and **Li, L.** (2022). Multimodal data integration via mediation analysis with high-dimensional exposures and mediators. *Human Brain Mapping*, 43, 2519–2533.

[30] Shi, C., Xu, T., Bergsma, W., and **Li, L.** (2021). Double generative adversarial networks for conditional independence testing. *Journal of Machine Learning Research*, 22, 1-32.

[31] Sun, W.W., Hao, B., and **Li, L.** (2021). Tensor data analysis. *Wiley StatsRef: Statistics Reference Online*, 1-26.

[32] Wang, Y.R., **Li, L.**, Li, J.J. and Huang, H. (2021). Network modeling in biology: statistical methods for gene and brain networks. *Statistical Science*, 36, 89-108.

[33] Ye, Y., Xia, Y., and **Li, L.** (2021). Paired test of matrix graphs and brain connectivity analysis. *Biostatistics*, 22, 402-420.

[34] Zhao, Y., **Li, L.**, and Caffo, B.S. (2021). Multimodal neuroimaging data integration and pathway analysis. *Biometrics*, 77, 879-889.

[35] Zhang, J., Sun, W.W., and **Li, L.** (2020). Mixed-effect time-varying stochastic blockmodel and application in brain connectivity analysis. *Journal of the American Statistical Association*, 115, 2022-2036.

[36] Xia, Y., **Li, L.**, Lockhart, S.N., Jagust, W. (2020). Simultaneous covariance inference for multimodal integrative analysis. *Journal of the American Statistical Association*, 115, 1279-1291

[37] Kim, K., Li, B., Yu, Z., and **Li, L.** (2020). On post dimension reduction statistical inference. *The Annals of Statistics*, 48, 1567-1592.

[38] Wang, M., and **Li, L.** (2020). Learning from binary multiway data: probabilistic tensor decomposition and its statistical optimality. *Journal of Machine Learning Research*, 21, 1-38.

[39] Guo, X., **Li, L.**, and Wu, Q. (2020). Modeling interactive components by coordinate kernel polynomial models. *Mathematical Foundations of Computing*, 3, 263-277.

[40] Sun, W.W. and **Li, L.** (2019). Dynamic tensor clustering. *Journal of the American Statistical Association*, 114, 1894-1907.

[41] Wang, W., Zhang, X., and **Li, L.** (2019). Common reducing subspace model and network alternation analysis. *Biometrics*, 75, 1109-1120.

[42] Zhang, X., **Li, L.**, Zhou, H., and Shen, D. (2019). Tensor generalized estimating equations for longitudinal imaging analysis. *Statistica Sinica*, 29, 1977-2005.

[43] Xia, Y. and **Li, L.** (2019). Matrix graph hypothesis testing and application in brain connectivity alternation detection. *Statistica Sinica*, 29, 303-328.

[44] **Li, L.**, Kang, J., Lockhart, S.N., Adams, J., and Jagust, W. (2019). Spatially adaptive varying correlation analysis for multimodal neuroimaging data. *IEEE Transactions on Medical Imaging*, 38, 113-123.

[45] Zhu, Y. and **Li, L.** (2018). Multiple matrix Gaussian graphs estimation. *Journal of the Royal Statistical Society, Series B.*, 80, 927-950.

[46] Li, Q. and **Li, L.** (2018). Integrative linear discriminant analysis with guaranteed error rate improvement. *Biometrika*, 105, 917-930.

[47] Li, X., Xu, D., Zhou, H., and **Li, L.** (2018). Tucker tensor regression and neuroimaging analysis. *Statistics in Biosciences*, 10, 520-545.

[48] Adams J.N., Lockhart, S.N., **Li, L.**, and Jagust, W.J. (2018). Relationships between tau and glucose metabolism reflect Alzheimer's disease pathology in cognitively normal older adults. *Cerebral Cortex*, 29, 1997-2009.

[49] **Li, L.** (2018). Sufficient dimension reduction. *Wiley StatsRef: Statistics Reference Online*, 1-8.

[50] **Li, L.** and Zhang, X. (2017). Parsimonious tensor response regression. *Journal of the American Statistical Association*, 112, 1131-1146.

[51] Sun, W.W. and **Li, L.** (2017). Sparse tensor response regression and neuroimaging analysis. *Journal of Machine Learning Research*, 18, 4908-4944.

[52] Zhang, X. and **Li, L.** (2017). Tensor envelope partial least squares regression. *Technometrics*, 59, 426-436.

[53] Xia, Y. and **Li, L.** (2017). Hypothesis testing of matrix graph model and application in brain connectivity analysis. *Biometrics*, 73, 780-791.

[54] Li, Z., Suk, H-I., Shen, D., and **Li, L.** (2016). Sparse multi-response tensor regression for Alzheimer's disease study with multivariate clinical assessments. *IEEE Transactions on Medical Imaging*, 35, 1927-1936.

[55] Kang, J. and **Li, L.** (2016). Discussion of "Fiber direction estimation, smoothing and tracking in diffusion MRI" by R. Wong, et al. *The Annals of Applied Statistics*, 10, 1162-1165

[56] Guo, Z., **Li, L.**, Lu, W., and Li, B. (2015). Groupwise dimension reduction via envelope method. *Journal of the American Statistical Association*, 110, 1515-1527.

[57] Zhou, H., and **Li, L.** (2014). Regularized matrix regression. *Journal of the Royal Statistical Society, Series B.*, 76, 463-483.

[58] Ding, X., **Li, L.**, and Zhu, L.X. (2014). Goodness-of-fit testing-based selection for large-p-small-n problems: a two-stage ranking approach. *Journal of Statistical Planning and Inference*, 145, 148-164.

[59] Zhao, J., Leng, C., **Li, L.**, and Wang, H. (2013). High dimensional influence measure. *The Annals of Statistics*, 41, 2639-2667.

[60] Zhou, H., **Li, L.**, and Zhu, H. (2013). Tensor regression with applications in neuroimaging data analysis. *Journal of the American Statistical Association*, 108, 540-552.

[61] Zhu, H., **Li, L.**, and Zhou, H. (2012). Nonlinear dimension reduction with Wright-Fisher kernel for genotype aggregation and association mapping. *Bioinformatics*, 28, 375-381.

[62] Sun, W., and **Li, L.** (2012). Multiple loci mapping via model-free variable selection. *Biometrics*, 68, 18-22.

[63] Li, B., Artemiou, A., and **Li, L.** (2011). Principal support vector machines for linear and nonlinear sufficient dimension reduction. *The Annals of Statistics*, 39, 3182-3210.

[64] Zhu, L.P., **Li, L.**, Li, R., and Zhu, L.X. (2011). Model-free feature screening for ultrahigh dimensional data. *Journal of the American Statistical Association*, 106, 1464-1475.

[65] Reich, B.J., Bondell, H.D., and **Li, L.** (2011). Sufficient dimension reduction via Bayesian mixture modeling. *Biometrics*, 67, 886-895.

[66] Lu, W., and **Li, L.** (2011). Sufficient dimension reduction for censored regressions. *Bio-

metrics, 67, 513-523.

[67] Zhu, H., and **Li, L.** (2011). Biological pathway selection through nonlinear dimension reduction. *Biostatistics*, 12, 429-444.

[68] Wu, Y., and **Li, L.** (2011). Asymptotic properties of sufficient dimension reduction with a diverging number of predictors. *Statistica Sinica*, 21, 707-730.

[69] **Li, L.**, Zhu, L.P., and Zhu, L.X. (2011). Inference on the primary parameter of interest with the aid of dimension reduction estimation. *Journal of the Royal Statistical Society, Series B.*, 73, 59-80.

[70] Shao, X., and **Li, L.** (2011). Data-driven multi-touch attribution models. *Proceedings of the 17th ACM SIGKDD international conference on knowledge discovery and data mining*, San Diego, CA.

[71] **Li, L.** (2010). Dimension reduction for high dimensional data. In *Statistical Methods in Molecular Biology*, Ed. Bang, H., Zhou, X., Van Epps, H.L. and Mazumdar, M. Humana Press.

[72] **Li, L.**, Li, B., and Zhu, L.X. (2010). Groupwise dimension reduction. *Journal of the American Statistical Association*, 105, 1188-1201.

[73] Cai, Y., Chow, M.Y., Lu, W., and **Li, L.** (2010). Statistical feature selection from massive data in distribution fault diagnosis. *IEEE Transactions on Power Systems*, 25, 642-648.

[74] Cai, Y., Chow, M.Y., Lu, W., and **Li, L.** (2010). Evaluation of distribution fault diagnosis algorithms using ROC curves. *Proceedings of Power and Energy Society General Meeting*, Minneapolis, MN. 1-6.

[75] Cook, R.D., and **Li, L.** (2009). Dimension reduction in regressions with exponential family predictors. *Journal of Computational and Graphical Statistics*, 18, 774-791.

[76] Setodji, C.M., and **Li, L.** (2009). Model free multivariate reduced-rank regression with categorical predictors. *Statistica Sinica*, 19, 1119-1136.

[77] **Li, L.**, and Yin, X. (2009). Longitudinal data analysis using sufficient dimension reduction method. *Computational Statistics and Data Analysis*, 53, 4106-4115.

[78] **Li, L.** (2009). Exploiting predictor domain information in sufficient dimension reduction. *Computational Statistics and Data Analysis*, 53, 2665-2672.

[79] Bondell, H.D., and **Li, L.** (2009). Shrinkage inverse regression estimation for model free variable selection. *Journal of the Royal Statistical Society, Series B.*, 71, 287-299.

[80] Cornish, K.M., Kogan, C.S., **Li, L.**, Turk, J., Jacquemont, S., and Hagerman, R.J. (2009). Lifespan changes in working memory in fragile X premutation males. *Brain and Cognition*, 69, 551-558.

[81] Lu, W., and **Li, L.** (2008). Boosting methods for nonlinear transformation models with censored survival data. *Biostatistics*, 9, 658-677.

[82] **Li, L.**, and Tsai, C.L. (2008). Constrained regression model selection. *Journal of Statistical Planning and Inference*, 138, 3939-3949.

[83] **Li, L.**, and Yin, X. (2008). Rejoinder to "A note on sliced inverse regression with regularizations". *Biometrics*, 64, 984-986.

[84] **Li, L.**, and Lu, W. (2008). Sufficient dimension reduction with missing predictors. *Journal of the American Statistical Association*, 103, 822-831.

[85] **Li, L.** (2008). Comments on "Augmenting the bootstrap to analyze high dimensional genomic data" by S. Tyekucheva and F. Chiaromonte. *Test*, 17, 22-24.

[86] **Li, L.**, and Yin, X. (2008). Sliced inverse regression with regularizations. *Biometrics*, 64, 124-131.

[87] Leehey, M.A., Berry-Kravis, E., Goetz, C.G., Zhang, L., Hall, D.A., **Li, L.**, Rice, C.D., Lara, R., Cogswell, J., Reynolds, A., Gane, L., Jacquemont, S., Tassone, F., Grigsby, J., Hagerman, R.J., and Hagerman, P.J. (2008). FMR1 CGG repeat length predicts motor dysfunction in premutation carriers. *Neurology*, 70, 1397-1402.

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[90] **Li, L.**, Cook, R.D., and Tsai, C.L. (2007). Partial inverse regression method. *Biometrika*, 94, 615-625.

[91] **Li, L.**, and Nachtsheim, C.J. (2007). Comment on "Fisher lecture: dimension reduction in regression" by R. D. Cook. *Statistical Science*, 22, 36-39.

[92] **Li, L.**, Simonoff, J.S., and Tsai, C.L. (2007). Tobit model estimation and sliced inverse regression. *Statistical Modelling*, 7, 107-123.

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[96] **Li, L.**, and Nachtsheim, C.J. (2006). Sparse sliced inverse regression. *Technometrics*. 48, 503-510.

[97] Azari, R., **Li, L.**, and Tsai, C.L. (2006). Longitudinal data model selection. *Computational Statistics and Data Analysis*, 50, 3053-3066.

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[99] **Li, L.**, Cook, R.D., and Nachtsheim, C.J. (2005). Model-free variable selection. *Journal of the Royal Statistical Society, Series B.*, 67, 285-299.

[100] **Li, L.**, and Li, W. (2005). Tabu search and perturbation methods in the construction of supersaturated designs. *American Journal of Mathematical and Management Sciences*, 25, 189-205.

[101] **Li, L.**, Cook, R.D., and Nachtsheim, C.J. (2004). Cluster-based estimation for sufficient dimension reduction. *Computational Statistics and Data Analysis*, 47, 175-193.

[102] **Li, L.**, and Li, H. (2004). Dimension reduction methods for microarrays with application to censored survival data. *Bioinformatics*, 20, 3406-3412.

[103] **Li, L.**, and Nachtsheim, C.J. (2004). Discussion of "A goodness-of-fit test for single-index models" by Y. Xia, et al. *Statistica Sinica*, 14, 28-34.

[104] Cook, R.D., and **Li, L.** (2003). Discussion of "The focused information criterion" by G. Claeskens and N.L. Hjort. *Journal of the American Statistical Association*, 98, 925-928.

[105] **Li, L.** (2002). Comment on "An adaptive estimation of dimension reduction space" by Y. Xia, et al. *Journal of the Royal Statistical Society, Series B.*, 64, 399-400.

GRANTS

▷ NIH R01AG080043.   09/2023 - 08/2028
The blood-brain barrier and Alzheimer pathology
Co-Investigator   (PI: William Jagust)

▷ NSF CIF-2102227.   07/2021 - 06/2024
Collaborative Research: Graphical Modeling of Multivariate Functions.
Principle Investigator

▷ NSF I-Corps-2133869.   06/2021 - 11/2022
Hilbert Matching.
Principle Investigator

▷ NIH R01AG061303.   02/2019 - 11/2022
New Statistical Methods for Multicenter Multimodal Longitudinal Neuroimaging Analysis.
Principle Investigator

▷ NIH R01AG062542.   09/2019 - 08/2024
Mechanisms of Alzheimer's Disease Progression in the Aging Brain
Co-Investigator   (PI: Susan Landau)

▷ NIH R01AG034570.   09/2016 - 08/2021
Neural and Biochemical Mechanisms of Cognitive Aging
Co-Investigator   (PI: William Jagust)

▷ NSF DMS-1613137.   09/2016 - 08/2019

Collaborative Research: Tensor Envelope Model - A New Approach for Regressions with Tensor Data.
Principle Investigator

▷ NSF DMS-1310319.   07/2013 - 06/2016
Tensor Regressions and Applications in Neuroimaging Data Analysis.
Co-Principle Investigator   (PI: Hua Zhou)

▷ NSF DMS-1106668.   07/2011 - 06/2014
New Dimension Reduction Approaches for Modern Scientific Data with High Dimensionality and Complex Structure.
Principle Investigator

▷ Research Grants Council of Hong Kong   01/2010 - 12/2011
On Inference and Variable Selection for Semiparametric Models with High Dimensional Predictors.
Co-Principle Investigator (PI: Lixing Zhu)

▷ NSF DMS-0706919.   09/2007 - 09/2010
Sufficient Dimension Reduction for Missing, Censored, and Correlated Data.
Principle Investigator

PRESENTATIONS

► **Invited Conference Talks**

▷ IMS International Conference on Statistics and Data Science, Lisbon, Portugal   12/2023

▷ Joint Statistical Meetings, Toronto, Canada   08/2023

▷ Annual Conference for Statistical Methods in Imaging, Minneapolis, MN   05/2023

▷ IMS International Conference on Statistics and Data Science, Florence, Italy   12/2022

▷ Joint Statistical Meetings, Washington, D.C.   08/2022

▷ Annual Conference for Statistical Methods in Imaging, Nashville, TN   05/2022

▷ Workshop on New Challenges and Novel Solutions in
   Statistics and Data Science, Irvine, CA   04/2022

▷ ENAR, Houston, TX   03/2022

▷ Joint Statistical Meetings, Seattle, WA   09/2021

▷ Annual Conference for Statistical Methods in Imaging, Atlanta, GA   05/2021

▷ Pacific Causal Inference Conference, Beijing, China   09/2020

▷ Joint Statistical Meetings, Philadelphia, PA   08/2020

▷ Joint Statistical Meetings, Denver, CO   08/2019

▷ International Workshop on Perspectives on High-dimensional Data Analysis,
   Uppsala, Sweden   06/2019

▷ International Conference on Frontiers of Data Science, Hangzhou, China   05/2019

- ▷ Computational and Methodological Statistics Workshop, Pisa, Italy 12/2018
- ▷ Joint Statistical Meetings, Vancouver, Canada 08/2018
- ▷ Peter Hall Memorial Conference, Davis, CA 05/2018
- ▷ Joint Statistical Meetings, Baltimore, MD 08/2017
- ▷ ISI World Statistics Congress, Marrakech, Morocco 07/2017
- ▷ International Conference on Econometrics and Statistics, Hong Kong, China 06/2017
- ▷ ENAR, Washington, DC 03/2017
- ▷ ICSA International Conference, Shanghai, China 12/2016
- ▷ Joint Statistical Meetings, Chicago, IL 08/2016
- ▷ Annual Conference for Statistical Methods in Imaging, Aurora, CO 06/2016
- ▷ SAMSI Workshop on Challenges in Functional Connectivity Modeling and Analysis, Durham, NC 04/2016
- ▷ Workshop on Mathematical and Statistical Challenges in Neuroimaging Data Analysis, Banff, Canada 02/2016
- ▷ IMS International Conference on Statistics and Probability, Kunming, China 06/2015
- ▷ SRCOS Summer Research Conference, Carolina Beach, NC 06/2015
- ▷ Inaugural Conference for Statistical Methods in Imaging, Ann Arbor, MI 05/2015
- ▷ International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Plenary Speaker, Greensboro, NC 10/2014
- ▷ ICSA and KISS Applied Statistics Symposium, Portland, OR 06/2014
- ▷ International Conference on Statistics and Probability, Chengdu, China 07/2013
- ▷ Workshop on Meeting the Challenges of High Dimension, Singapore City, Singapore 10/2012
- ▷ European Conference on Computational Biology, Basel, Switzerland 09/2012
- ▷ Second IMS Asia Pacific Rim Meeting, Tsukuba, Japan 07/2012
- ▷ Joint Statistical Meetings, Miami, FL 08/2011
- ▷ ICSA Applied Statistics Symposium, New York, NY 06/2011
- ▷ First Joint Biostatistics Symposium, Beijing, China 07/2010
- ▷ International Conference on Statistical Analysis of Complex Data, Kunming, China 07/2010
- ▷ ENAR, New Orleans, LA 03/2010
- ▷ Summer Research Conference, Jekyll Island, GA 06/2009
- ▷ Joint Statistical Meetings, Denver, CO 08/2008
- ▷ Workshop on Future Directions in High-Dimensional Analysis, Cambridge, UK 06/2008
- ▷ ICSA Applied Statistics Symposium, Piscataway, NJ 06/2008

▷ Current and Future Trends in Nonparametrics Conference, Columbia, SC	10/2007
▷ International Conference on Bioinformatics, Hangzhou, China	06/2007
▷ ICSA Applied Statistics Symposium, Raleigh, NC	06/2007
▷ Spring Research Conference, Technometrics Invited Session, Ames, IA	05/2007
▷ ENAR, IMS Invited Session, Tampa, FL	03/2006
▷ Quality and Productivity Research Conference, Minneapolis, MN	05/2005

▶ **Invited Seminar Talks**

▷ Statistics Laboratory, University of Cambridge	08/2023
▷ Department of Statistics, Tech University of Vinnea	06/2023
▷ Department of Biomedical Data Science, Stanford University	05/2023
▷ Department of Statistics, Chinese University of Hong Kong	04/2023
▷ Department of Biostatistics, Harvard University	03/2023
▷ Department of Statistics, Rutgers University	03/2023
▷ Department of Statistics, Stony Brook University	12/2022
▷ Department of Statistics, Rice University	11/2022
▷ Department of Biostatistics, University of Texas Health Science Center	11/2022
▷ School of Statistics, University of Minnesota	10/2022
▷ Department of Statistics, Stanford University	03/2022
▷ Department of Statistics, City University of Hong Kong	05/2021
▷ Department of Statistics, University of Illinois, Urbana-Champaign	04/2021
▷ Department of Statistics, Ohio State University	04/2021
▷ Department of Biostatistics, University of Pittsburg	03/2021
▷ Department of Biostatistics and Epidemiology, University of Pennsylvania	10/2019
▷ Department of Statistical Science, Temple University	10/2019
▷ Department of Biomedical Data Science, Stanford University	03/2019
▷ Department of Biostatistics, University of Michigan	11/2018
▷ Department of Statistics, University of California, Irvine	10/2017
▷ Department of Biostatistics, University of California, Los Angeles	10/2017
▷ Department of Biostatistics, University of Minnesota	10/2017
▷ Department of Statistics, Fudan University, China	07/2017
▷ Department of Applied Mathematics and Statistics, University of California, Santa Cruz	
	05/2017
▷ Department of Biostatistics, Columbia University	04/2017

▷ Department of Statistics, University of North Carolina, Chapel Hill   04/2016

▷ Department of Biostatistics, University of Washington   03/2016

▷ Department of Epidemiology and Biostatistics, University of California, San Francisco
    10/2015

▷ Adobe, Inc., San Jose, CA   08/2015

▷ Department of Statistics, Southwestern University of Finance and Economics, China
    07/2015

▷ Department of Mathematics, University of Electronic Science and Technology, China
    07/2015

▷ Genentech, Inc., San Francisco, CA   05/2015

▷ Department of Statistics, University of California, Berkeley   09/2014

▷ Division of Biostatistics, University of California, Berkeley   01/2014

▷ Department of Statistics, Stanford University   03/2013

▷ Department of Applied Mathematics and Statistics, University of California, Santa Cruz
    01/2013

▷ Marshall School of Business, University of Southern California   11/2012

▷ Department of Statistics, University of California, Davis   02/2012

▷ Division of Biostatistics, Stanford University   10/2011

▷ Center for Imaging and Neurodegenerative Diseases, San Francisco   09/2011

▷ Department of Biostatistics, Columbia University   04/2011

▷ Department of Environmental Medicine, New York University   04/2011

▷ Department of Statistics, University of Missouri   03/2011

▷ Department of Statistics and Applied Probability, National University of Singapore
    06/2010

▷ Department of Statistics and Probability, Michigan State University   03/2010

▷ Department of Statistics, University of Illinois, Urbana Champaign   02/2010

▷ Department of Statistics, University of Toronto   11/2009

▷ School of Statistics, University of Minnesota   09/2009

▷ Department of Statistics, Stanford University   07/2009

▷ Booth School of Business, University of Chicago   05/2009

▷ The Methodology Center, Penn State University   02/2009

▷ Biostatistics Branch, National Institute of Environmental Health Sciences   10/2008

▷ School of Public Health, Biostatistics Program, Yale University   09/2008

▷ Department of Statistics, University of Virginia   04/2008

▷ Department of Statistical Science, Duke University   03/2008

▷ Department of Mathematics, Hong Kong Baptist University	12/2007
▷ Department of Statistics, University of North Carolina, Chapel Hill	12/2007
▷ Department of Statistics, Penn State University	11/2007
▷ Department of Statistics, Oregon State University	05/2007
▷ Department of Bioinformatics and Biostatistics, University of Louisville	04/2006
▷ Department of Statistics, University of Georgia	11/2005
▷ Department of Biostatistics, University of Minnesota	02/2005
▷ Department of Biostatistics, Johns Hopkins University	02/2005
▷ Department of Biostatistics, University of Washington	02/2005
▷ Department of Statistics, North Carolina State University	02/2005
▷ Department of Biostatistics, Emory University	02/2005
▷ Department of Mathematics and Statistics, University of Massachusetts, Amherst	01/2005
▷ Center for Statistical Sciences, Brown University	01/2005
▷ Department of Statistics, University of Illinois, Urbana Champaign	01/2005
▷ Department of Statistics, Northwestern University	01/2005
▷ Institute for Data Analysis and Visualization, University of California, Davis	11/2003

▶ **Invited Short Courses**

▷ Northeast Normal University, Statistics Graduate Summer Program	07/2013
▷ SAS Institute, JMP Group	05/2007

▶ **Contributed Conference Talks**

▷ Workshop on Model Selection and Related Areas, Vienna, Austria	07/2008
▷ Joint Statistical Meetings, Salt Lake City, UT	08/2007
▷ ENAR, Atlanta, GA	03/2007
▷ Joint Statistical Meetings, Seattle, WA	08/2006
▷ International Conference on Robust Statistics, Lisbon, Portugal	07/2006
▷ Joint Statistical Meetings, Minneapolis, MN	08/2005
▷ Joint Statistical Meetings, San Francisco, CA	08/2003
▷ INFORMS Annual Meeting, San Jose, CA	11/2002

TEACHING EXPERIENCE

▷ Big Data: A Public Health Perspective. UC Berkeley	Spring, 2015-2023
▷ Introduction to Multivariate Statistics. UC Berkeley	Fall, 2014-2022
▷ Advanced Topic: Big Data, a Statistical Perspective. NCSU	Fall, 2013

▷ Nonlinear Models for Univariate and Multivariate Responses. NCSU   Fall, 2013, 2010
▷ Statistical Multivariate Analysis. NCSU   Spring, 2011, 2010, 2009
▷ Advanced Topic: Introduction to Dimension Reduction for Regression. NCSU

     Fall, 2009, 2007
▷ Introduction to Probability and Distribution Theory. NCSU   Spring, 2008, 2007
▷ Introduction to Statistical Inference and Regression. NCSU

     Fall, 2009, Fall, 2008, Spring, 2006, Fall, 2005
▷ Introduction to Statistical Analysis. University of Minnesota   Fall, 2002

CONSULTING EXPERIENCE

▷ Statistical Consulting Center, University of Minnesota   Spring, 2001, Summer, 2002
▷ Statistical Consulting Center, 3M St Paul, MN (Intern)   Summer 1999, Summer, 2000

PROFESSIONAL SERVICES

▷ Editor-in-Chief, *Annals of Applied Statistics*, 2025-2027.
▷ Standing Member, NIH Emerging Imaging Technologies in Neuroscience (EITN) Study Section, 2023-2027.
▷ Associate Editor, *Journal of the American Statistical Association*, 2014-present.
▷ Associate Editor, *Journal of the Royal Statistical Society, Series B.*, 2024-present.
▷ Associate Editor, *Journal of Computational and Graphical Statistics*, 2023-present.
▷ Associate Editor, *Statistics in Biosciences*, 2021-present.
▷ Associate Editor, *Annals of Applied Statistics*, 2022-2024.
▷ Associate Editor, *Journal of Statistical Theory and Practice*, 2019-2023.
▷ Associate Editor, *Technometrics*, 2013-2018.
▷ Program Chair, American Statistical Association, Section on Statistics in Imaging, 2017.