Zhiyang Zhou, Ph.D., Asst. Prof.

- Operation of Statistics, University of Manitoba
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- https://zhiyanggeezhou.github.io/



Academic Interests

- Deep learning/deep neural networks;
- Functional/longitudinal data analysis;
- Survival analysis;
- Tensor data analysis;
- Design of experiments.

Employment

2021 – **Assistant Professor (Tenure-Track)**, University of Manitoba, Canada.

2020 – 2021 Postdoctoral Trainee, Northwestern University, United States. Supervisor: Lihui Zhao, Associate Professor.

2019 **Sessional Instructor**, Simon Fraser University, Canada.

Education

Ph.D. in Statistics, Simon Fraser University, Canada.

Supervisor: Richard A. Lockhart, Professor, Fellow of Royal Society of Canada.

Thesis: Supervised Basis Functions Applied to Functional Regression and Classification.

2009 – 2012 M.Sc. in Probability & Statistics, Nankai University, China. Supervisor: Runchu Zhang, Professor.

2005 – 2009 **B.Sc. in Statistics**, Beijing Normal University, China.

Publications

- **Zhou**, **Z.**, & Sang, P. (2022). Continuum centroid classifier for functional data. *Canadian Journal of Statistics*, 50, 200–220. Ohttps://doi.org/10.1002/cjs.11624
- Zhao, Y., Wang, Y., Liu, J., Xia, H., Xu, Z., Hong, Q., **Zhou**, **Z.**, & Petzold, L. (2021). Empirical quantitative analysis of COVID-19 forecasting models. The 9th Workshop on Data Mining in Biomedical Informatics and Healthcare (DMBIH'21) in Conjunction with IEEE International Conference on Data Mining (ICDM'21). 6 https://arxiv.org/abs/2110.00174
- **Zhou**, **Z.** (2021). Fast implementation of partial least squares for function-on-function regression. *Journal of Multivariate Analysis*, 185, 104769. 6 https://doi.org/10.1016/j.jmva.2021.104769
- **Zhou**, **Z.**, & Zhang, R. (2014). A generalized general minimum lower order confounding criterion for nonregular designs. *Journal of Statistical Planning and Inference*, 148, 95–100.

 https://doi.org/10.1016/j.jspi.2013.12.003
- Wang, W., Gong, D., **Zhou**, **Z.**, & Guo, Y. (2012). Robustness of the aerosol weekly cycle over Southeastern China. *Atmospheric Environment*, 61, 409–418.

 https://doi.org/10.1016/j.atmosenv.2012.07.029

Research Grants

- 2022 2027
- **Principal Investigator**, NSERC Discovery Grant (with Discovery Launch Supplement).
- 2021 2027
- **Principal Investigator**, University of Manitoba Research Startup Fund.

Invited Presentations

2022

- The 15th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2022).
- ICSA International Conference.
- Northwestern Biostatistics Seminar Series, Feinberg School of Medicine.
- ICSA-Canada Chapter Symposium.
- ICSA Applied Statistics Symposium.
- Machine Learning Special Interest Group Meeting, George & Fay Yee Centre for Healthcare Innovation.

2021

- NIC-ASA & ICSA Midwest Chapter Joint Fall Meeting.
- ICSA Applied Statistics Symposium.

Teaching

- University of Manitoba: STAT 3100 Introduction to Statistical Inference (2022 Fall), STAT 3690 Multivariate Analysis (2022–2023 Winter), STAT 4100 Statistical Inference (2022 Fall).
- Simon Fraser University: STAT 450 Statistical Theory (2019 Fall).

Miscellaneous

Award

2021

- **Best Paper Award**, the 9th Workshop on Data Mining in Biomedical Informatics and Healthcare (DMBIH'21) in Conjunction with IEEE International Conference on Data Mining (ICDM'21).
- 2019 **Excellence in Teaching**, Simon Fraser University Faculty of Science.

Reviewer

- Journals: Biometrics, Biostatistics & Epidemiology, Computational Statistics, Canadian Journal of Statistics, IISE Transations, Journal of Computational & Graphical Statistics, Journal of Multivariate Analysis, Knowledge-Based Systems, Mathematical Modelling and Analysis, Statistics in Medicine, Statistics & Probability Letters, Technometrics, Trials.
- **Conferences**: Conference on Neural Information Processing Systems (NeurIPS), International Conference on Learning Representations (ICLR).