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

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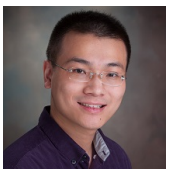
https://zhiyanggeezhou.github.io/



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

2015 – 2020 **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

1. **Zhou**, **Z.**, & Sang, P. (2022). Continuum centroid classifier for functional data. *Canadian Journal of Statistics*, *50*, 200–220. https://doi.org/10.1002/cjs.11624
2. 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)*. https://arxiv.org/abs/2110.00174
3. **Zhou**, **Z.** (2021). Fast implementation of partial least squares for function-on-function regression. *Journal of Multivariate Analysis*, *185*, 104769. https://doi.org/10.1016/j.jmva.2021.104769
4. **Zhou**, **Z.** (2019). Functional continuum regression. *Journal of Multivariate Analysis*, *173*, 328–346. https://doi.org/10.1016/j.jmva.2019.03.006
5. **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
6. 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
- ICSA International Conference.
- The 15th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2022).
- 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).

Supervision

- Ke Wang (M.Sc. student, 2022 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).*