Xinran Miao

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EDUCATION

Ph.D. in Statistics

Fall 2021 - present

University of Wisconsin-Madison, USA

• Advisor: Jiwei Zhao

M.S. in Statistics

Fall 2019 - Spring 2021

University of Wisconsin-Madison, USA

B.S. in Statistics

Fall 2016 - Spring 2020

Nankai University, China

RESEARCH INTERESTS

Model transportability, post-prediction inference, sensitivity analysis, semiparametric methods, and causal inference.

WORKING PAPERS

Miao, X. and Zhao. J, 2024. Transportabity Index and Its Efficient Estimation. Under Review.

PUBLICATIONS & PREPRINTS

- 5. Miao, J.*, **Miao, X.***, Wu, Y., Zhao, J., and Lu, Q. (2023). Assumption-lean and Data-adaptive Post-Prediction Inference. *Submitted*. [Preprint]
- 4. Miao, J., Wu, Y., Sun, Z., **Miao, X.**, Lu, T., Zhao, J., and Lu, Q. (2024). Valid inference for machine learning-assisted GWAS. *Submitted*. [Preprint]
- 3. Mao, L., Kim, K. and **Miao, X.**, 2022. Sample size formula for general win ratio analysis. *Biometrics*, 78(3), pp.1257-1268. [Journal]
- 2. Zheng, M., **Miao, X.** and Sankaran, K., 2022. Interactive Visualization and Representation Analysis Applied to Glacier Segmentation. *ISPRS International Journal of Geo-Information*, 11(8), p.415. [Journal]
- Hernando, D., Zhao, R., Yuan, Q., Aliyari Ghasabeh, M., Ruschke, S., Miao, X., Karampinos, D.C., Mao, L., Harris, D.T., Mattison, R.J. and Jeng, M.R., Pedrosa, I., Kamel, I.R., Vasanawala, S., Yokoo, T. and Reeder, S.B. 2022. Multicenter Reproducibility of Liver Iron Quantification with 1.5-T and 3.0-T MRI. Radiology, p.213256. [Journal]

TEACHING EXPERIENCE

Teaching Assistant at UW-Madison

• STAT 575: Statistical Methods for Spatial Data

Spring 2024

- STAT 849: Theory and Application of Regression and Analysis of Variance I Fall 2023
- STAT 301: Introductory to Statistics

Fall 2021, Spring 2022

^{*} Co-first authors.

TALKS & POSTERS

- (Poster) Efficient Estimation for the Transportability Index using Neural Networks. *Statistics and Optimization in Data Science Workshop*, Purdue University, June 2023.
- (Poster) Efficient Estimation for the Transportability Index using Neural Networks. *Midwest Machine Learning Symposium 2023*, May 2023.
- (Talk) Transportability Index: Inverse Probability Weighting with Neural Network. Statistics Graduate Student Association Seminar at UW-Madison, December 2022.

PROFESSIONAL ORGANIZATIONS

• Institute of Mathematical Statistics.