Xinran Miao

University of Wisconsin-Madison
xinran.miao@wisc.edu
https://xinranmiao.github.io

EDUCATION

Ph.D. in Statistics — *Fall 2021 - present*
University of Wisconsin-Madison, USA
- Advisor: Hyunseung Kang

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

Transportability/generalizability, sensitivity analysis, post-prediction inference.

PUBLICATIONS

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]
1. 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]

* Co-first authors.

PREPRINTS

1. Jiang, H.*, **Miao, X.***, Thairu, M., Beebe, M., Grupe, D., Davidson, R.J., Handelsman, J., Sankaran, K. (2024+). multimedia: Multimodal Mediation Analysis of Microbiome Data. *Submitted.* [Preprint]
2. Miao, J.*, **Miao, X.***, Wu, Y., Zhao, J., and Lu, Q. (2023). Assumption-lean and Data-adaptive Post-Prediction Inference. *Submitted.* [Preprint]
3. 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]

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*

TALKS & POSTERS

4. (Talk) Transportability Index: A Scalar Summary of Transportation Robustness. *ENAR 2024*, Baltimore, March 2024. [Slides]
3. (Poster) Efficient Estimation for the Transportability Index using Neural Networks. *Statistics and Optimization in Data Science Workshop*, Purdue University, June 2023.
2. (Poster) Efficient Estimation for the Transportability Index using Neural Networks. *Midwest Machine Learning Symposium 2023*, May 2023.
1. (Talk) Transportability Index: Inverse Probability Weighting with Neural Network. *Statistics Graduate Student Association Seminar*, UW-Madison, December 2022.