Xinran Miao

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EDUCATION	Ph.D. in Statistics University of Wisconsin-Madison, USA • Advisor: Hyunseung Kang	*Fall 2021 - present*
	M.S. in Statistics University of Wisconsin-Madison, USA	*Fall 2019 - Spring 2021*
	B.S. in Statistics Nankai University, China	*Fall 2016 - Spring 2020*

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, Summer 2024*

TALKS & POSTERS

5. (Talk) Transfer Learning Between U.S. Presidential Elections. *UW-Madison Statistics Graduate Student Association Seminar*, Madison, WI, April 2024. [Slides]

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. *UW-Madison Statistics Graduate Student Association Seminar*, UW-Madison, December 2022.