

Xinran Miao

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EDUCATION	Ph.D. in Statistics University of Wisconsin-Madison, USA • Advisor: Hyunseung Kang	<i>Fall 2021 - present</i>
	M.S. in Statistics University of Wisconsin-Madison, USA	<i>Fall 2019 - Spring 2021</i>
	B.S. in Statistics Nankai University, China	<i>Fall 2016 - Spring 2020</i>
RESEARCH INTERESTS	Transportability/generalizability, sensitivity analysis, post-prediction inference.	
PUBLICATIONS	<ol style="list-style-type: none">3. Mao, L., Kim, K. and Miao, X., 2022. Sample size formula for general win ratio analysis. <i>Biometrics</i>, 78(3), pp.1257-1268. [Journal]2. Zheng, M., Miao, X. and Sankaran, K., 2022. Interactive Visualization and Representation Analysis Applied to Glacier Segmentation. <i>ISPRS International Journal of Geo-Information</i>, 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. <i>Radiology</i>, p.213256. [Journal] <p>* Co-first authors.</p>	
PREPRINTS	<ol style="list-style-type: none">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. <i>Submitted</i>. [Preprint]2. Miao, J.*, Miao, X.*, Wu, Y., Zhao, J., and Lu, Q. (2023). Assumption-lean and Data-adaptive Post-Prediction Inference. <i>Submitted</i>. [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. <i>Submitted</i>. [Preprint]	
TEACHING EXPERIENCE	Teaching Assistant at UW-Madison • STAT 575: Statistical Methods for Spatial Data • STAT 849: Theory and Application of Regression and Analysis of Variance I • STAT 301: Introductory to Statistics	<i>Spring 2024</i> <i>Fall 2023</i> <i>Fall 2021, Spring 2022</i>

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.