

# Xinran Miao

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EDUCATION	Ph.D. in Statistics University of Wisconsin-Madison, USA • Advisor: <a href="#">Hyunseung Kang</a>	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	<ol style="list-style-type: none"><li>3. Mao, L., Kim, K. and <b>Miao, X.</b>, 2022. Sample size formula for general win ratio analysis. <i>Biometrics</i>, 78(3), pp.1257-1268. [<a href="#">Journal</a>]</li><li>2. Zheng, M., <b>Miao, X.</b> 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. [<a href="#">Journal</a>]</li><li>1. Hernando, D., Zhao, R., Yuan, Q., Aliyari Ghasabeh, M., Ruschke, S., <b>Miao, X.</b>, 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. [<a href="#">Journal</a>]</li></ol> <p>* Co-first authors.</p>	
PREPRINTS	<ol style="list-style-type: none"><li>1. Jiang, H. *, <b>Miao, X.*</b>, Thairu, M., Beebe, M., Grupe, D., Davidson, R.J., Handelsman, J., Sankaran, K. (2024+). multimedia: Multimodal Mediation Analysis of Microbiome Data. <i>Submitted</i>. [<a href="#">Preprint</a>]</li><li>2. Miao, J.*, <b>Miao, X.*</b>, Wu, Y., Zhao, J., and Lu, Q. (2023). Assumption-lean and Data-adaptive Post-Prediction Inference. <i>Submitted</i>. [<a href="#">Preprint</a>]</li><li>3. Miao, J., Wu, Y., Sun, Z., <b>Miao, X.</b>, Lu, T., Zhao, J., and Lu, Q. (2024). Valid inference for machine learning-assisted GWAS. <i>Submitted</i>. [<a href="#">Preprint</a>]</li></ol>	
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.	Spring 2024 Fall 2023 Fall 2021, Spring 2022

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