Fangyi Wang

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Education

PhD in Statistics, The Ohio State University, 2021-2026 (expected).

Dissertation title: "Conformal Prediction for Functional and Shape Data".

Advisors: Sebastian Kurtek, Yuan Zhang.

MPH in Biostatistics, Yale University, 2019-2021.

BS in Biological Sciences, Tianjin University, 2014-2018.

Research Interests

Functional and shape data analysis, conformal prediction and distribution-free inference, nonparametric methods, Bayesian statistics, applied statistical methods for policy targeting

Publications

1. **Wang, F.**, Bharath, K., Chkrebtii, O., and Kurtek, S. (2024). Probabilistic size-and-shape functional mixed models. *Advances in Neural Information Processing Systems*, **37**, 50031–50061.

Preprints and Working Papers

2. **Wang, F.**, Kurtek, S., and Zhang, Y. (2025). Joint registration and conformal prediction for partially observed functional data. *arXiv preprint*, arXiv:2502.15000. Tentative accept subject to satisfactory revisions at *Journal of Computational and Graphical Statistics*.

3. **Wang, F.**, Xu, X., Ghias, E., Mooney, S., Stroup, A., Rundle, A., Sowa, W., Henry, K., Stroup A., Harris, G., Li, J., Stanich, P., Hampel, H. and Plascak, J. Description and validation of a built environment audit across space and time for cohort linkages with residential histories. Under review at *Journal of Medical Internet Research*.

4. Wang, L., Jiao, Z., and **Wang, F.** (2025). Policy-Oriented Binary Classification: Improving (KD-)CART Final Splits for Subpopulation Targeting. *arXiv preprint*, arXiv:2502.15072. Under review.

5. **Wang, F.***, Shao, M.*, and Zhang, Y. Distribution-free matrix prediction under arbitrary missing pattern. In preparation. (*Equal contribution)

6. Matuk, J., **Wang, F.**, Chkrebtii, O., Bharath, K., Brophy, J., and Kurtek, S. Empirical Bayesian shape model for estimation and classification of fragmented fossil bovid teeth. In preparation.

Honors & Awards

Travel Grant, *Advances in Neural Information Processing Systems*, 2024.

Travel Grant, Optimization-conscious Econometrics Summer School, University of Chicago, 2024.

Honorable Mention, Hayes Advanced Research Forum, The Ohio State University, 2023.

First Place, Poster Session at Interdisciplinary Research Fall Forum, The Ohio State University, 2022.

Undergraduate Thesis Award, Tianjin University, 2018.

National Fellowship, Tianjin University, 2015, 2016.

Conference Presentations

09.2025 *Joint Registration and Conformal Prediction for Partially Observed Functional Data*, poster session, The 2025 ISU-NISS Conference on AI and Statistics, Ames, Iowa.

12.2024 *Probabilistic Size-and-shape Functional Mixed Models*, The Thirty-Eighth Annual Conference on Neural Information Processing Systems (NeurIPS 2024), Vancouver, Canada.

07.2024 *Conformal Prediction for Fragmented Functional Data*, The 7th International Conference on Econometrics and Statistics (EcoSta 2024), Beijing, China.

01.2024 *Distribution-free Matrix Prediction Under Arbitrary Missing Pattern*, IMS Asia Pacific Rim Meeting (APRM), Melbourne, Australia.

08.2023 *Empirical Bayesian Shape Model for Estimation and Classification of Fragmented Bovid Teeth*, Joint Statistical Meetings (JSM), Toronto, Canada.

Teaching

Fall 2024, Spring 2025. STAT 1450.01: Introduction to the Practice of Statistics, Instructor.

Summer 2024. STAT 1430.01: Statistics for the Business Sciences, Course coordinator.

Fall 2023. STAT 4202: Introduction to Mathematical Statistics II, Teaching assistant.

Spring 2023. STAT 3202: Introduction to Statistical Inference for Data Analytics, Teaching assistant.

Fall 2022. STAT 2450: Introduction to Statistical Analysis I, Teaching assistant.

Service

Reviewer for NeurIPS (2025), AISTATS (2026).

Miscellaneous

Programming Languages: MATLAB, R, Python.

Languages: Chinese (native), Korean (beginner).

Skills: First aid (CPR&AED) certification.