Heejun Shin

Email: hshin1@ufl.edu CONTACT Department of Statistics 103C Griffin-Floyd Hall, P.O. Box 118545 Webpage: hshin111.github.io University of Florida Gainesville, FL 32611 **INTERESTS** Causal Inference, Bayesian Modeling, High-dimensional Inference, Environmental Statistics **EDUCATION Ph.D. Candidate** in Statistics, University of Florida (expected) 2024 Thesis: Causal Inference with Bayesian Modeling for Challenging Environmental Health Problems Advisior: Professor Joseph Antonelli **B.S.** in Applied Statistics, Konkuk University 2019 Ranked first in class Research Assistant, University of Florida 2021-present RESEARCH **POSITIONS** PI: Professor Joseph Antonelli Topic: Robust statistical approaches to understanding the causal effect of air pollution mixtures WORKING "Treatment effect heterogeneity and importance measures for multivariate continuous treatments" with Antonelli, **PAPERS** J., Linero, A., Braun, D., and Irene, K. **PUBLICATIONS & Shin, H.**, Braun, D., Irene, K., and Antonelli, J. (2023+). A spatial interference approach to account for mobility PREPRINTS in air pollution studies with multivariate continuous treatments. arXiv:2305.14194. [Link] Shin, H. and Antonelli, J. (2023). Improved inference for doubly robust estimators of heterogeneous treatment effects. Biometrics, 79(4): 3140-3152. [Journal][arXiv] **HONORS &** Early Career Paper Award, American Statistical Association Biometrics Section 2024 **AWARDS** Kenneth and Janet Keene Endowed Dissertation Fellowship, College of Liberal Arts and Sciences, University of Florida 2024 Mark CK Yang Student Research Award, UF Joint Statistics and Biostatistics Workshop 2023 Boyd Harshburger Travel Award funded by National Science Foundation, The Southern Regional Council on Statistics 2022 **The John Van Ryzin Award** for the best student paper of the year, International Biometric Society Eastern North American Region 2022 Distinguished Student Paper Award, International Biometric Society Eastern North American Region 2022 College of Liberal Arts and Sciences Graduate Student Travel Award, University of Florida - Joint Statistical Meetings 2023 - Eastern North American Region Spring Meeting, Joint Statistical Meetings 2022 The President's Award for an outstanding graduating undergraduate student, Korean Statistical Society 2019 **Academic Excellence Scholarship** - Chungbuk Human Resource Development Foundation 2018 - The South Korean National Agricultural Cooperative Federation 2018

PRESENTATIONS

- Konkuk University

Contributed talk. "A spatial interference approach to account for mobility in air pollution studies with multivariate continuous treatments" *Bayesian Young Statisticians Meeting*. Virtual 2023.

2013-2018

Contributed talk. "A spatial interference approach to account for mobility in air pollution studies with multivariate continuous treatments" *UF Joint Statistics and Biostatistics Workshop*. Gainesville, Florida 2023.

Seminar talk. "Identifying Interactions between Covariates and Continuous Exposures via Targeted Smoothing" *UFSTAT Student Seminar Series*. Gainesville, Florida 2023.

Contributed talk. "A spatial interference approach to account for mobility in air pollution studies with multivariate continuous treatments" *Joint Statistical Meetings*. Toronto, Canada 2023.

Contributed poster. "Causal Effects of Continuous Exposures in the Presence of Spatial Interference: the Effects of Air Pollution on Public Health." *American Causal Inference Conference*. Austin, TX. 2023.

Contributed poster. "Improved inference for doubly robust estimators of heterogeneous treatment effects." *The Southern Regional Council on Statistics Summer Research Conference*. Jekyll Island, GA. 2022.

Contributed talk. "Improved inference for doubly robust estimators of heterogeneous treatment effects." *Joint Statistical Meetings*. Washington, D.C. 2022.

Contributed talk (as the John Van Ryzin Award winner). "High-dimensional and nonparametric Bayesian methodology for treatment effect heterogeneity." *Eastern North American Region Spring Meeting*. Houston, TX. 2022.

TEACHING EXPERIENCE

Instructor, University of Florida STA3024 - Introduction to Statistics II

Sum A, Sum B, Fall 2023

Teaching Assistant, University of Florida

STA 3024 - Introduction to Statistics II

STA 4241 - Statistical Learning

STA 4321 - Introduction to Probability

STA 4322 - Introduction to Statistical Theory

STA 4502 - Nonparametric Statistical Methods

STA 6166 - Statistical Methods in Research

SERVICE

Organizer, *UFSTAT Student Seminar Series*, Department of Statistics, University of Florida Graduate Mentor, *Statistics Undergraduate Research Experience*, SRCoS

2022-2023

2022

2019-2023

Journal Referee, PeerJ: life and environment

REFERENCES

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