Yuqian Zhang

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Positions

Assistant Professor   September 2022 - present
Institute of Statistics and Big Data, Renmin University of China

Education

University of California, San Diego, U.S.   September 2018 - March 2022
Ph.D. in Mathematics with a Specialization in Statistics
Advisor: Jelena Bradic

University of California, San Diego, U.S.   September 2016 - June 2018
M.S. in Statistics

Wuhan University, China   September 2012 - June 2016
B.S. in Mathematics and Applied Mathematics

Research Interests

- Causal Inference
- Semi-supervised Learning
- High-dimensional Statistics
- Machine Learning
- Precision Medicine

Publications

Jelena Bradic[#], Weijie Ji[#], and **Yuqian Zhang**[#] (2024). High-dimensional inference for dynamic treatment effects. The Annals of Statistics, 52(2), 415-440.

Yuqian Zhang[*], Abhishek Chakrabortty[*], and Jelena Bradic[*] (2023). Double Robust Semi-Supervised Inference for the Mean: Selection Bias under MAR Labeling with Decaying Overlap. Information and Inference: A Journal of the IMA, 12(3), 2066-2159.

Yuqian Zhang and Jelena Bradic (2022). High-dimensional semi-supervised learning: in search of optimal inference of the mean. Biometrika, 109(2), 387-403. *(This paper received the 2021 Student Paper Award from the ASA Nonparametric Statistics Section.)*

Preprints

Facheng Yu and **Yuqian Zhang** (2024). Data integration using covariate summaries from external sources. arXiv preprint arXiv:2411.15691.

Yuqian Zhang and Jelena Bradic (2024). Causal inference through multi-stage learning and doubly robust deep neural networks. arXiv preprint arXiv:2407.08560.

Yuqian Zhang, Weijie Ji, and Jelena Bradic (2024). Adaptive Split Balancing for Optimal Random Forest. arXiv preprint arXiv:2402.11228.

Kai Chen and **Yuqian Zhang** (2023). Enhancing efficiency and robustness in high-dimensional linear regression with additional unlabeled data. arXiv preprint arXiv:2311.17685.

Yuqian Zhang*, Abhishek Chakrabortty*, and Jelena Bradic* (2023). The Decaying Missing-at-Random Framework: Doubly Robust Causal Inference with Partially Labeled Data. arXiv preprint arXiv:2305.12789.

Yuqian Zhang, Jelena Bradic, and Weijie Ji (2021). Dynamic treatment effects: high-dimensional inference under model misspecification. arXiv preprint arXiv:2111.06818.

(# alphabetical order, * equal contribution, __ supervised student)

Presentations

The 2nd International Conference on Machine Learning and Statistics	August 2024
Joint Conference on Statistics and Data Science in China	July 2024
IMS-China International Conference on Statistics and Probability	July 2024
ICSA 2024 China Conference	June 2024
School of Statistics and Data Science, Nankai University	May 2024
School of Management, Fudan University	April 2024
School of Statistics and Management, Shanghai University of Finance and Economics	April 2024
Chinese Causal Inference Conference	March 2024
School of Statistics, Renmin University of China	November 2023
IMS New Researcher Conference	August 2023
Joint Conference on Statistics and Data Science in China	July 2023
ICSA 2023 China Conference	June 2023
Chinese Causal Inference Conference	May 2023
School of Mathematics and Statistics, Wuhan University	April 2023
School of Data Science, The Chinese University of Hong Kong, Shenzhen	March 2023
Interdisciplinary Seminar on "Data Science and Life and Health"	October 2022
Department of Applied Mathematics, The Hong Kong Polytechnic University	September 2022
The 5th International Conference on Econometrics and Statistics	June 2022
Department of Family Medicine and Public Health, UC San Diego	April 2022
ENAR 2022 Spring Meeting	March 2022
2021 Joint Statistical Meeting	August 2021
Southern California Machine Learning Symposium (Poster), UC Los Angeles	March 2019
Statistics & Data Science Symposium (Poster), UC San Diego	January 2019

Research Grants

NSFC the Young Scientists Fund. "Statistical Inference based on High-dimensional Semi-supervised Data". PI.

NSFC the General Fund. "Nonparametric Modeling and Inference for Continuous Treatment Effect". Co-investigator (with Zheng Zhang).

Awards and Honors

Best Student Paper Award (Nonparametric Statistics Section),   2021
American Statistical Association

Teaching Assistant Award, Department of Mathematics, UC San Diego   2019 - 2020

Friends of the International Center Scholarship, UC San Diego   May 2019

Outstanding Graduate, Wuhan University   June 2016

Service Activities

Council Member, Causal Inference Branch of the Chinese Association for Applied Statistics

Council Member, Chinese Statistical Association of Young Scholars

Reviewers: *Journal of the American Statistical Association* (6), *Biometrics*, *Biostatistics*, *Journal of Nonparametric Statistics* (2), *Lifetime Data Analysis*, *Science China Mathematics*, *Statistica Sinica*, *Statistics*, etc.

Teaching

Instructor, Institute of Statistics and Big Data, Renmin University of China   2022 - present

- Causal Inference (PhD level)   Fall 2024
- Special Topics in Mathematical Statistics (PhD level)   Spring 2023 & 2024
- Special Topics in Business and Economic Statistics (PhD level)   Fall 2023
- Special Topics in Biostatistics (PhD level)   Spring 2023
- Advanced Statistical Computing (PhD level)   Fall 2022

Teaching Assistant, Department of Mathematical Sciences, UC San Diego   2018 - 2022

- Math 281A, 281B - Mathematical Statistics (graduate level)
- Math 189 - Data Analysis and Inference (upper division)
- Math 183 - Statistical Methods (upper division)
- Math 180A - Introduction to Probability (upper division)
- Math 11 - Calculus-Based Prob & Stats (lower division)