Yuqian Zhang

Phone: +86 13276851253

Homepage: https://yuqianruc.github.io

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

B.S. in Mathematics and Applied Mathematics

September 2012 - June 2016

Research Interests

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

Publications

<u>Kai Chen</u> and **Yuqian Zhang** (2025+). Enhancing efficiency and robustness in high-dimensional linear regression with additional unlabeled data. arXiv preprint arXiv:2311.17685. Accepted by Biometrics. (Kai Chen received the Second Prize for Outstanding Papers in the the 8th National Statistics Doctoral Academic Forum)

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

<u>Kai Chen</u> and **Yuqian Zhang** (2025). Balancing utility and cost in dynamic treatment regimes. arXiv preprint arXiv:2507.17360.

<u>Facheng Yu</u> 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.

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, Weijie Ji, and Jelena Bradic (2021). Dynamic treatment effects: high-dimensional inference under model misspecification. arXiv preprint arXiv:2111.06818. (This paper received the ICSA 2025 China Conference Junior Researcher Award)

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

Awards and Honors

Junior Researcher Award, International Chinese Statistical Association	June 2025
Best Student Paper Award (Nonparametric Statistics Section), American Statistical Association	August 2021
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

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).

Presentations

Chinese Causal Inference Conference	July 2025
ICSA 2025 China Conference	June 2025
School of Mathematics and Statistics, Wuhan University	June 2025
2025 Annual Meeting of the CAAS Committee on Multivariate Analysis Application	June 2025
School of Management, University of Science and Technology of China	June 2025
School of Statistics, Capital University of Economics and Business	May 2025

School of Statistics, Renmin University of China	April	2025
School of Statistics, East China Normal University	April	2025
School of Mathematical Sciences, Tongji University	April	2025
School of Management, Fudan University	April	2025
School of Statistics and Mathematics, Central University of Finance and Economi	cs March	2025
Guanghua School of Management, Peking University	February	2025
School of Mathematics and Statistics, Wuhan University	January	2025
Causal Inference: Bridging Theory and Practice	January	2025
The 18th International Joint Conference CFE-CMStatistics	December	2024
The First Macau International Conference on Business Intelligence and Analytics	December	2024
School of Statistics and Data Science, Nankai University	December	2024
School of Statistics and Management, Shanghai University of Finance and Econom	nics Nov.	2024
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 Econom	nics 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

Service Activities

Council Member, Causal Inference Branch of the Chinese Association for Applied Statistics
Council Member, Chinese Statistical Association of Young Scholars
Council Member, Machine Learning Branch of the Chinese Association for Applied Statistics
Council Member, Bayesian Statistics Branch of the Chinese Association for Applied Statistics

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 - 2025
• 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)