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

<u>Kai Chen</u> and **Yuqian Zhang** (2025). Semi-supervised linear regression: enhancing efficiency and robustness in high dimensions. Biometrics, 81(3), ujaf113. *(Kai 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

Yilizhati Anniwaer and **Yuqian Zhang** (2025). Semi-supervised inference for treatment heterogeneity. arXiv preprint arXiv:2509.05048. *(Yilizhati received the Third Prize for Outstanding Papers in the the 9th National Statistics Doctoral Academic Forum)*

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

Facheng Yu, Zhen Qi, 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)*

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

2025 Xiamen University Symposium on Modern Statistics	Dec 2025
School of Mathematical Sciences, Shanghai Jiao Tong University	Dec 2025
2025 International Conference on Data Science and Brain-Inspired Intelligence	Dec 2025
School of Statistics & Institute of Statistics and Big Data, Renmin University of China	Sep 2025
The 8th International Conference on Econometrics and Statistics	Aug 2025
The 3rd 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 & Institute of Statistics and Big Data, Renmin University of China	Apr 2025
School of Statistics, East China Normal University	Apr 2025
School of Mathematical Sciences, Tongji University	Apr 2025
School of Management, Fudan University	Apr 2025
School of Statistics and Mathematics, Central University of Finance and Economics	Mar 2025
Guanghua School of Management, Peking University	Feb 2025
School of Mathematics and Statistics, Wuhan University	Jan 2025
Causal Inference: Bridging Theory and Practice	Jan 2025
The 18th International Joint Conference CFE-CMStatistics	Dec 2024
The 1st Macau International Conference on Business Intelligence and Analytics	Dec 2024
School of Statistics and Data Science, Nankai University	Dec 2024
School of Statistics and Management, Shanghai University of Finance and Economics	Nov 2024
The 2nd International Conference on Machine Learning and Statistics	Aug 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	Apr 2024
School of Statistics and Management, Shanghai University of Finance and Economics	Apr 2024
The 2nd Chinese Causal Inference Conference	Mar 2024
School of Statistics & Institute of Statistics and Big Data, Renmin University of China	Nov 2023
IMS New Researcher Conference	Aug 2023
Joint Conference on Statistics and Data Science in China	July 2023
ICSA 2023 China Conference	June 2023
The 1st Chinese Causal Inference Conference	May 2023
School of Mathematics and Statistics, Wuhan University	Apr 2023
School of Data Science, The Chinese University of Hong Kong, Shenzhen	Mar 2023
Interdisciplinary Seminar on "Data Science and Life and Health"	Oct 2022
Department of Applied Mathematics, The Hong Kong Polytechnic University	Sep 2022
The 5th International Conference on Econometrics and Statistics	June 2022
Department of Family Medicine and Public Health, UC San Diego	Apr 2022
ENAR 2022 Spring Meeting	Mar 2022

2021 Joint Statistical Meeting	Aug 2021
Southern California Machine Learning Symposium (Poster), UC Los Angeles	Mar 2019
Statistics & Data Science Symposium (Poster), UC San Diego	Jan 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

- Probability Theory and Mathematical Statistics C (undergrad level) — Fall 2025
- Machine Learning (PhD level) — Fall 2025
- 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 (PhD level)
- Math 189 - Data Analysis and Inference (undergrad level)
- Math 183 - Statistical Methods (undergrad level)
- Math 180A - Introduction to Probability (undergrad level)
- Math 11 - Calculus-Based Prob & Stats (undergrad level)