

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

September 2012 - June 2016

B.S. in Mathematics and Applied Mathematics

Research Interests

- Causal Inference
- Missing Data Problems
- Semi-supervised Inference
- High-dimensional Statistics
- Machine Learning

Publications and Preprints

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.*)

Yuqian Zhang^{*}, Abhishek Chakraborty^{*} 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.

Jelena Bradic[#], Weijie Ji[#] and **Yuqian Zhang**[#] (2021). High-dimensional inference for dynamic treatment effects. arXiv preprint arXiv:2110.04924. Minor revision at *The Annals of Statistics*.

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

Yuqian Zhang^{*}, Abhishek Chakraborty^{*} and Jelena Bradic^{*} (2023). Semi-Supervised Causal Inference: Generalizable and Double Robust Inference for Average Treatment Effects under Selection Bias with Decaying Overlap. arXiv preprint arXiv:2305.12789.

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

(# alphabetical order, * co-first authors, ____ supervised student)

Presentations

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|---|----------------|
| 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 |
| Department of Applied Mathematics, The Hong Kong Polytechnic University | September 2022 |
| Interdisciplinary Seminar on “Data Science and Life and Health” | October 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

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

Service Activities

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

Reviewers: *Journal of the American Statistical Association* (5), *Biostatistics*, *Journal of Nonparametric Statistics* (2), *Lifetime Data Analysis*, *Statistics*

Teaching

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

- Special Topics in Business and Economic Statistics (PhD level) Fall 2023
- Special Topics in Mathematical Statistics (PhD level) Spring 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)