

Zhenghao Zeng

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Home page: tigerzhzeng.com

Research interests	Causal inference, nonparametric statistics, high-dimensional statistics	
Education	Carnegie Mellon University	Pittsburgh, PA
	Ph.D. in Statistics	08/2020 – Present
	Advisor: Prof. Edward H. Kennedy	
	Carnegie Mellon University	Pittsburgh, PA
	M.S. in Statistics	08/2020 – 05/2021
	University of Science and Technology of China	Hefei, Anhui
	B.S. in Statistics	08/2016 – 06/2020
Honors and awards	Student Paper Award, Statistical Learning and Data Science (SLDS) Section, ASA	
	2024	
	ENAR Distinguished Student Paper Award (International Biometric Society ENAR Spring Meeting)	
	2023	
	Guo Moruo Scholarship (summa cum laude at USTC)	
	2019	
	National Scholarship of China (USTC)	
	2018	
Publications	Zeng, Z. , Gu, Y., and Xu, G. (2023). A Tensor-EM Method for Large-Scale Latent Class Analysis with Binary Responses. <u>Psychometrika</u> , 88(2), 580-612.	
	He, Y., Meng, B., Zeng, Z. and Xu, G. (2021). On the phase transition of Wilks' phenomenon. <u>Biometrika</u> , 108(3), 741-748.	
Preprints	Zeng, Z. , Arbour, D., Feller, A., Addanki, R., Rossi, R., Sinha, R., and Kennedy, E.H. (2024). Continuous Treatment Effects with Surrogate Outcomes. arXiv preprint arXiv:2402.00168.	
	Bonvini, M., Zeng, Z. , Yu, M., Kennedy, E. H., and Keele, L. (2023). Flexibly Estimating and Interpreting Heterogeneous Treatment Effects of Laparoscopic Surgery for Cholecystitis Patients. arXiv preprint arXiv:2311.04359.	
	Zeng, Z. , Kennedy, E. H., Bodnar, L. M., and Naimi, A. I. (2023). Efficient generalization and transportation. arXiv preprint arXiv:2302.00092.	

Levis, A. W., Bonvini, M., **Zeng, Z.**, Keele, L., and Kennedy, E. H. (2023). Covariate-assisted bounds on causal effects with instrumental variables. arXiv preprint arXiv:2301.12106.

Experience

Adobe Research

San Jose, CA

Research Intern

05/2023 – 08/2023

Mentors: David Arbour and Prof. Avi Feller (Berkeley)

Continuous treatment effects with surrogate outcomes.

University of Michigan, Ann Arbor

Ann Arbor, MI

Research Assistant

06/2019 – 09/2019

Mentor: Prof. Gongjun Xu

Large-scale latent class analysis and high-dimensional testing.

Teaching experience

Teaching assistant, Carnegie Mellon University

08/2020–05/2022

36-225 Introduction to Probability

36-401 Modern Regression

36-402 Advanced Methods for Data Analysis (×2)

Teaching assistant, USTC

09/2019 – 05/2020

Single-variable Calculus

Regression Analysis

Presentations

Causal Inference and Missing Data Group at Inria

Virtual

Efficient generalization and transportation

02/2024

American Causal Inference Conference

Austin, TX

Causal inference with high-dimensional discrete covariates

05/2023

International Biometric Society ENAR Spring Meeting

Nashville, TN

Efficient generalization and transportation

03/2023

Academic Service

Reviewer

American Journal of Epidemiology (1)

Biometrika (1)

Electronic Journal of Statistics (5)

Journal of American Statistical Association (1)

Miscellaneous

Coursework

Mathematics and Probability: Mathematical Analysis(A+), Linear Algebra(A+), Real Analysis(A+), Functional Analysis(A+), Advanced Probability Theory(A+), Stochastic Process(A+), Probability Limiting Theory(A+)

Statistics: Mathematical Statistics(A+), Regression Analysis(A+), Multivariate Analysis(A+), Bayesian Analysis(A+), Nonparametric Statistics(A+), Advanced Statistical Theory(A)

Machine Learning: Advanced Machine Learning(A+), Convex Optimization(A+), Probabilistic Graphical Models(A+), Deep Learning(A+)

Programming: Statistical Computing(A+), Deep Learning System(A), Foundations of Algorithms(A+)