

Yichen Zhang

403 Mitch Daniels Blvd, West Lafayette, IN, 47907

Phone: (765)496-5023

Email: yichen@purdue.edu

Website: <https://web.ics.purdue.edu/~yichen/>

EMPLOYMENT

2020 - now Assistant Professor in Quantitative Methods,
Daniels School of Business, Purdue University

EDUCATION

2015 –2020 Ph.D, Stern School of Business, New York University
2011 –2015 B.S. in Mathematics, B.A. in Economics, Peking University

PUBLICATIONS

Journal Articles

- Xi Chen, Wenbo Jing, Weidong Liu, Yichen Zhang. Distributed Estimation and Inference for Semi-parametric Binary Response Models, *The Annals of Statistics*, to appear, 2024+.
- Xi Chen, Zehua Lai, He Li, Yichen Zhang. Online Statistical Inference for Stochastic Optimization via Kiefer-Wolfowitz Methods, *Journal of the American Statistical Association*, to appear, 2023+.
- Wenjie Li, Zhanyu Wang, Yichen Zhang, Guang Cheng. Variance Reduction on Adaptive Stochastic Mirror Descent. *Machine Learning*, 2022, 111, 4639–4677.
- Xi Chen, Weidong Liu, Yichen Zhang. First-order Newton-type Estimator for Distributed Estimation and Inference. *Journal of the American Statistical Association*, 2022, 117(540), 1858-1874.
- Yichen Zhang, Clifford M. Hurvich. Estimation of alpha, beta and Portfolio Weights in a Pure- Jump Model with Long Memory in Volatility. *Stochastic Processes and their Applications*. 2022, 150, 972-994.
- Xi Chen, Jason D. Lee, Xin T. Tong, Yichen Zhang. Statistical Inference for Model Parameters in Stochastic Gradient Descent. *The Annals of Statistics*, 2020, 48(1), 251-273.
- Xi Chen, Weidong Liu, Yichen Zhang. Quantile Regression under Memory Constraint. *The Annals of Statistics*, 2019, 47(6), 3244-3273.

Manuscripts Under Review

- Rene Caldentey, Avi Giloni, Clifford Hurvich, Yichen Zhang. Information Design and Sharing in Supply Chains. Under review. Under review.
- Rene Caldentey, Avi Giloni, Clifford Hurvich, Yichen Zhang. Roughening the Orders: Information Distortion in Supply Chains. Under review.
- Shixin Wang, Jiawei Zhang, Yichen Zhang. The Impact of Profit Differentials on the Value of a Little Flexibility, Under review.
- Qiyu Han, Wei Sun, Yichen Zhang. Online Statistical Inference for Matrix Contextual Bandit, Under review.
- Xin Wen, Will Wei Sun, and Yichen Zhang. Online Tensor Inference, Under review.
- Weidong Liu, Jiyuan Tu, Yichen Zhang, Xi Chen. Online Estimation and Inference for Robust Policy Evaluation in Reinforcement Learning, Under review.

Xi Chen, Zehua Lai, He Li, Yichen Zhang. Online Statistical Inference for Contextual Bandits via Stochastic Gradient Descent, Under Review.

Kejie Tang, Weidong Liu, Yichen Zhang, Xi Chen. Acceleration of Stochastic Gradient Descent with Momentum by Averaging. Under Review.

Guixian Chen, Yumeng Wang, Yichen Zhang, Ziwei Zhu. Communication-Efficient Distributed Second-Order Methods, Under Review.

Jingyi Zhang, Yichen Zhang, Ping Ma, Wenxuan Zhong. Feature Space Fusion for Heterogeneous Scattered Data, Under Review.

Henry Lam, Kaizheng Wang, Yuhang Wu, Yichen Zhang. Adaptive Data Fusion for Multi-task Non-smooth Optimization. Under Review.

AWARDS AND HONORS

DSB Distinguish Instructors Recognition - MGMT 590, MGMT 475	2023
IMS Lawrence D. Brown Ph.D. Student Award	2020
Herman E. Krooss Prize, Outstanding Doctoral Dissertation, <i>New York University</i>	2020
Sydney Winters Fellowship	2019
IMS Hannan Graduate Student Travel Award	2019
Student & Early Career Travel Award, SDSS	2019
Best Student Paper Award, <i>Joint Statistical Meetings, SLDS Section</i>	2017

PRESENTATIONS

07/2024	Chinese Scholars Association for Management Science and Engineering, Xiamen, China
04/2024	IEOR Department, Columbia University, New York, NY
08/2023	Joint Statistical Meetings, Toronto, Canada
07/2023	Joint Conference on Statistics and Data Science, Beijing, China
07/2023	Department of Mathematics, Hong Kong University of Science and Technology, Hong Kong
07/2023	ICSA International Conference, Hong Kong
06/2023	MSOM Conference 2023 SIG Meetings on Supply Chain Management, Montreal, Canada
06/2023	School of Statistics, East China Normal University, Shanghai, China
02/2023	Stern School of Business, New York University, New York, NY
10/2022	Modern Statistical and Machine Learning Methods for Big Data, Ann Arbor, MI
12/2021	Computational and Methodological Statistics (CMStatistics), London, UK
08/2021	Joint Statistical Meetings, Virtual
08/2019	Joint Statistical Meetings, Denver, CO
05/2019	Symposium on Data Science and Statistics, Bellevue, WA
06/2018	ICSA Applied Statistics Symposium, New Brunswick, NJ
08/2017	Joint Statistical Meetings. Baltimore, MD

PROFESSIONAL SERVICE

Associate Editor: Journal of Computational and Graphical Statistics (2024- Now)

Reviewer: Annals of Statistics, Journal of American Statistical Association, Journal of Econometrics, Journal of Machine Learning Research, Operations Research, Statistical Analysis and Data Mining

Workshop Organizer: Statistics and Optimization in Data Science Workshop, May 26-27, 2023, Purdue University, West Lafayette, Indiana