

# **Yichen Zhang**

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#### **EMPLOYMENT**

7/2020 - present Assistant Professor of Quantitative Methods,
Daniels School of Business, Purdue University

### **EDUCATION**

9/2015 –5/2020 Ph.D, Department of Technology, Operations, and Statistics,

Stern School of Business, New York University

9/2011 –6/2015 B.S. in Mathematics, B.A. in Economics,

**Peking University** 

# **PUBLICATIONS**

Author lists marked with † are in alphabetical order.

## Refereed Journal Articles

- Q. Han, W.W. Sun, Y. Zhang<sup>†</sup>. Online Statistical Inference in Decision-Making with Matrix Context. *Annals of Statistics* (forthcoming), 2025+.
- W. Liu, J. Tu, X. Chen, Y. Zhang. Online Estimation and Inference for Robust Policy Evaluation in Reinforcement Learning.

Annals of Statistics (forthcoming), 2025+.

- R. Caldentey, A. Giloni, C. Hurvich, Y. Zhang<sup>†</sup>. Information Design and Sharing in Supply Chains. *Mathematics of Operations Research* (forthcoming), 2025+.
- E. Chen, X. Chen, W. Jing, Y. Zhang<sup>†</sup>. Distributed Tensor Principal Component Analysis with Data Heterogeneity.

Journal of the American Statistical Association (forthcoming), 2025+.

- 2024 Student Poster Award from the New England Statistics Symposium.
- X. Chen, W. Jing, W. Liu, Y. Zhang<sup>†</sup>. Distributed Estimation and Inference for Semi-parametric Binary Response Models.

The Annals of Statistics, 2024, 52(3), 922-947

X. Chen, Z. Lai, H. Li, Y. Zhang<sup>†</sup>. Online Statistical Inference for Stochastic Optimization via Kiefer-Wolfowitz Methods.

Journal of the American Statistical Association, 2024, 119(548), 2972–2982.

- W. Li, Z. Wang, Y. Zhang, G. Cheng. Variance Reduction on Adaptive Stochastic Mirror Descent. *Machine Learning*, 2022, 111, 4639–4677.
- Y. Zhang, C.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.

- X. Chen, W. Liu, Y. Zhang<sup>†</sup>. First-order Newton-type Estimator for Distributed Estimation and Inference. *Journal of the American Statistical Association*, 2022, 117(540), 1858–1874.
- X. Chen, J. Lee, X. Tong, Y. Zhang<sup>†</sup>. Statistical Inference for Model Parameters in Stochastic Gradient Descent. *The Annals of Statistics*, 2020, 48(1), 251–273.
  - 2017 ASA Student Paper Award from ASA Statistical Learning and Data Science Section.
- X. Chen, W. Liu, Y. Zhang<sup>†</sup>. Quantile Regression under Memory Constraint. *The Annals of Statistics*, 2019, 47(6), 3244–3273.
  - 2019 IMS Hannan Travel Awards.
  - 2019 Student & Early Career Travel Award, SDSS.

#### Revisions

- K. Tang, W. Liu, X. Chen, Y. Zhang. Acceleration of Stochastic Gradient Descent with Momentum by Averaging.
- X. Wen, W.W. Sun, and Y. Zhang. Online Tensor Inference.
- X. Chen, Z. Lai, He Li, Y. Zhang<sup>†</sup>. Online Statistical Inference for Contextual Bandits via Stochastic Gradient Descent.

#### **Under Review**

- Y. Peng, X. Wang, R. Zhang, Y. Zhang<sup>†</sup>. Knowledge Transfer in Heterogeneous Support Vector Machine.
- R. Caldentey, A. Giloni, C. Hurvich, Y. Zhang<sup>†</sup>. Managing Inventory and Information Variability in Supply Chains.
- S. Wang, J. Zhang, Y. Zhang<sup>†</sup>. The Impact of Profit Differentials on the Value of a Little Flexibility.
- Z. Li, F. Ruan, Y. Zhang<sup>†</sup>. Composite Minimization Meets Nonsmooth Nonlinear Modeling: Convergence, Efficiency and Stability.
- H. Lam, K. Wang, Y. Wu, Y. Zhang<sup>†</sup>. Adaptive Data Fusion for Multi-task Non-smooth Optimization.
- R. Caldentey, A. Giloni, C. Hurvich, D. Simchi-Levi, P. Talwai, Y. Zhang<sup>†</sup>. Information of Sharing in Supply Chains: From a Delay Perspective.

#### **AWARDS AND HONORS**

Daniels School of Business (DSB) Young Faculty Scholar Award	2025
Institute of Mathematical Statistics (IMS) New Researchers Travel Award	2025
DSB Distinguish Instructors Recognition - Undergraduate Elective - MGMT 475	2024, 2023
DSB Distinguish Instructors Recognition - Online Master's - MGMT 590	2024, 2023
IMS Lawrence D. Brown Ph.D. Student Award	2020
Herman E. Krooss Prize, Outstanding Doctoral Dissertation, New York University	2020
Sydney Winters Fellowship	2019
IMS Hannan Graduate Student Travel Award	2019
Student & Early Career Travel Award, SDSS	2019
Best Student Paper Award, Joint Statistical Meetings, SLDS Section	2017

# **CONFERENCE PRESENTATIONS AND INVITED SEMINARS**

07/2025	Joint Conference on Statistics and Data Science, Hangzhou, China
06/2025	ICSA China Conference, Zhuhai, China
06/2025	WNAR/IMS Annual Meeting, Whistler, BC, Canada
06/2025	Chicago Operations Workshop, Chicago, IL
01/2025	Statistics Empowering Data Science (SEEDS) Conference, USC Marshall, Los Angeles, CA
12/2024	International Conference in Business Intelligence and Analytics, Macau
12/2024	Operations and Business Analytics, NYU Shanghai, Shanghai, China
11/2024	Department of Information and Decision Sciences, University of Illinois Chicago, Chicago, IL
11/2024	Conference on Statistical Learning and Data Science, Newport Beach, CA
10/2024	INFORMS Annual Meeting, Seattle, WA
07/2024	Chinese Scholars Association for Management Science and Engineering, Xiamen, China
07/2024	Hangzhou International Conference on Frontiers of Data Science, Hangzhou, China
07/2024	Conference on Intelligent Computing and Decision-Making, Shanghai, 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	Department of Decisions, Operations and Technology, Chinese University of 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
12/2022	Capital of Statistics, Virtual
10/2022	Modern Statistical and Machine Learning Methods for Big Data, Ann Arbor, MI
10/2022	INFORMS Annual Meeting, Indianapolis, IN
12/2021	Computational and Methodological Statistics (CMStatistics), London, UK
08/2021	Joint Statistical Meetings, Virtual
02/2020	Department of Statistics, University of Pittsburgh, Pittsburgh, PA
01/2020	Department of Statistics and Applied Probability, UC Santa Barbara, CA
01/2020	Krannert School of Management, Purdue University, West Lafayette, IN
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 (AOS), Journal of American Statistical Association (JASA), Journal of Econometrics, Journal of Machine Learning Research (JMLR), Management Science (MS), Operations Research (OR), Annals of Applied Statistics (AOAS), Bernoulli, Computational Optimization and Applications (COAP), Journal of Computational and Graphical Statistics (JCGS), Statistical Analysis and Data Mining (JADM), Biometrika, Advances in Neural Information Processing Systems (NeurIPS), International Conference on Machine Learning (ICML), International Conference on Learning Representations (ICLR), International Conference on Artificial Intelligence and Statistics (AISTATS)

Judge, MSOM Supply Chain Management Special Interest Group (SCM SIG)

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

#### Doctoral Thesis Committee Member:

He Li, Stern School of Business, New York University, 2022

Wenjie Li, Statistics, Purdue University, 2023

Qiyu Han, Quantitative Methods, Daniels School of Business, Purdue University, 2024

Cruz De Souza Marcelo, QM, Daniels School of Business, Purdue University, 2024

Yaxin Fang, Statistics, Purdue University, 2024

Pangpang Liu, QM, Daniels School of Business, Purdue University, 2025

### **TEACHING ACTIVITIES**

Listed in the order of Course, Semester, Level, Title, Mean Score / Scale.

Daniels School of Business, Purdue University

MGMT475, Spring 2025, UG, Machine Learning for Business

MGMT590, Spring 2025, G (Online), Deep Learning

MGMT590, Spring 2025, G, Machine Learning

MGMT475, Spring 2024, UG, Machine Learning for Business

MGMT590, Spring 2024, G (Online), Deep Learning

MGMT590, Spring 2024, G, Machine Learning

MGMT475, Spring 2023, UG, Machine Learning for Business

MGMT590, Spring 2023, G (Online), Deep Learning

MGMT590, Spring 2023, G, Machine Learning

MGMT590, Spring 2022, G (Online), Deep Learning

MGMT590, Spring 2022, G, Machine Learning

MGMT590, Summer 2021, G, Machine Learning

MGMT473, Spring 2021, UG, Data Mining

MGMT690, Fall 2020, G, Workshop in Analytics

Stern School of Business, New York University

STAT-UB.0001, Spring 2019, UG, Statistics for Business Control