

Yichen Zhang

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EMPLOYMENT

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

EDUCATION

Sep 2015 – Jun 2020 Ph.D, Department of Technology, Operations, and Statistics,
Stern School of Business, New York University
Sep 2011 – Jun 2015 B.S. in Mathematics, B.A. in Economics,
Peking University

PUBLICATIONS

Author lists marked with [†] are in alphabetical order.

Refereed Journal Articles

- [J13]. X. Chang, X. Chen, Z. Lai, H. Li, Z. Liu, Y. Zhang[†]. Online Statistical Inference for Contextual Bandits via Stochastic Gradient Descent.
Journal of the American Statistical Association, 2026+, to appear.
- [J12]. X. Wen, W.W. Sun, Y. Zhang. Online Tensor Inference.
Operations Research, 2025+, to appear.
— 2024 JSM Student Paper Award from the ASA Statistical Learning and Data Science Section.
- [J11]. Q. Han, W.W. Sun, Y. Zhang[†]. Online Statistical Inference in Decision-Making with Matrix Context.
Annals of Statistics, 2025, 53(5), 1963-1986.
— *NeurIPS, Journal-to-Conference track*, 2025.
- [J10]. R. Caldentey, A. Giloni, C. Hurvich, Y. Zhang[†]. Information Design and Sharing in Supply Chains.
Mathematics of Operations Research, 2025, 50(3), 1965-1991.
— *MSOM Conference SIG Meetings on Supply Chain Management*, 2023.
- [J9]. W. Liu, J. Tu, X. Chen, Y. Zhang. Online Estimation and Inference for Robust Policy Evaluation in Reinforcement Learning.
Annals of Statistics, 2025, 53(5), 2128-2152.
— *NeurIPS, Journal-to-Conference track*, 2025.

- [J8]. E. Chen, X. Chen, W. Jing, Y. Zhang[†]. Distributed Tensor Principal Component Analysis with Data Heterogeneity.
Journal of the American Statistical Association, 2025, 120(552), 2619–2631.
—*Student Poster Award* from the *New England Statistics Symposium*, 2025.
- [J7]. X. Chen, W. Jing, W. Liu, Y. Zhang[†]. Distributed Estimation and Inference for Semi-parametric Binary Response Models.
The Annals of Statistics, 2024, 52(3), 922–947.
- [J6]. X. Chen, Z. Lai, H. Li, Y. Zhang[†]. Online Statistical Inference for Stochastic Optimization via Kiefer-Wolfowitz Methods.
Journal of the American Statistical Association, 2024, 119(548), 2972–2982.
- [J5]. 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.
- [J4]. X. Chen, W. Liu, Y. Zhang[†]. First-order Newton-type Estimator for Distributed Estimation and Inference.
Journal of the American Statistical Association, 2022, 117(540), 1858–1874.
—*IMS Lawrence D. Brown Award*, 2021.
- [J3]. W. Li, Z. Wang, Y. Zhang, G. Cheng. Variance Reduction on Adaptive Stochastic Mirror Descent.
Machine Learning, 2022, 111, 4639–4677.
—*NeurIPS, Optimization for Machine Learning Workshop*, 2020.
- [J2]. X. Chen, J. Lee, X. Tong, Y. Zhang[†]. Statistical Inference for Model Parameters in Stochastic Gradient Descent.
The Annals of Statistics, 2020, 48(1), 251–273.
—*Student Paper Award* from *JSM Statistical Learning and Data Science Section*, 2017.
- [J1]. X. Chen, W. Liu, Y. Zhang[†]. Quantile Regression under Memory Constraint.
The Annals of Statistics, 2019, 47(6), 3244–3273.
—*IMS Hannan Travel Awards*, 2019.
—*Student & Early Career Travel Award*, SDSS, 2019.

Under Revision

- [R6]. R. Caldenty, A. Giloni, C. Hurvich, Y. Zhang[†]. Managing Inventory and Information Variability in Supply Chains.
- [R5]. S. Wang, J. Zhang, Y. Zhang[†]. The Impact of Profit Differentials on the Value of a Little Flexibility.
- [R4]. J. Tu, S. Wu, Y. Zhang, W. Zhou[†]. Generalized Rank Regression.
- [R3]. Y. Peng, X. Wang, R. Zhang, Y. Zhang[†]. Knowledge Transfer in Heterogeneous Support Vector Machine.
- [R2]. K. Tang, W. Liu, X. Chen, Y. Zhang. Acceleration of Stochastic Gradient Descent with Momentum by Averaging.

[R1]. J. Chang, L. Yang, Y. Zhang, W. Zhou[†]. *Feature-Rich, Data-Private: A Sparse Learning Framework for the High-Dimensional Newsvendor*.

Preprints and Working Papers

Y. Shen, Y. Zhang, W. Zhou[†]. *SGD with Dependent Data: Optimal Estimation, Regret, and Inference*.

R. Caldenteu, A. Giloni, C. Hurvich, P. Talwai, Y. Zhang[†]. *Binomial Smoothing for Inventory and Information Control*.

H. Lam, K. Wang, Y. Wu, Y. Zhang[†]. *Adaptive Data Fusion for Multi-task Non-smooth Optimization*.

P. Talwai, R. Caldenteu, A. Giloni, C. Hurvich, D. Simchi-Levi, Y. Zhang. *Designing Information Delays in Supply Chains*.

Y. Peng, X. Wang, R. Zhang, Y. Zhang[†]. *Transfer Learning in Contextual Bandit with Double Sampling*.

AWARDS AND HONORS

Daniels School of Business <i>Young Faculty Scholar Award</i>	2025
Computational Resources Credit Grant for AI Research, <i>Thinking Machines Lab</i>	2025
IMS <i>New Researchers Travel Award</i>	2025
DSB Distinguish Instructors Recognition	5 in 2023-2025
IMS <i>Lawrence D. Brown Award</i>	2021
<i>Herman E. Krooss Prize</i>	2020
<i>Sydney Winters Fellowship</i>	2019
IMS <i>Hannan Graduate Student Travel Award</i>	2019
<i>Student & Early Career Travel Award, SDSS</i>	2019
<i>Best Student Paper Award, Joint Statistical Meetings, SLDS Section</i>	2017

INVITED SEMINARS AND WORKSHOPS

- 02/2026 Supply Chain and Operations Management, Purdue University, West Lafayette, IN
- 01/2026 Management Science, Herbert Business School, University of Miami, Miami, FL
- 01/2026 Applied Mathematics, Hong Kong Polytechnic University, Hong Kong
- 11/2025 Business Analytics & Statistics, Haslam College of Business, University of Tennessee, Knoxville, TN
- 11/2025 Statistics and Data Science, Northwestern University, Evanston, IL
- 10/2025 Quantitative Methods, Daniels School of Business, Purdue University, West Lafayette, IN
- 06/2025 Operations Management, Booth School of Business, University of Chicago, Chicago, IL
- 06/2025 Statistics, Southwestern University of Finance and Economics, Chengdu, China
- 01/2025 Data Sciences and Operations, Marshall School of Business, USC, Los Angeles, CA
- 12/2024 Faculty of Business Administration, University of Macau, Macau
- 11/2024 Information and Decision Sciences, UIC Business School, Chicago, IL
- 07/2024 Antai College of Economics and Management, Shanghai Jiao Tong University, Shanghai, China
- 04/2024 Industrial Engineering and Operations Research, Columbia University, New York, NY
- 07/2023 Mathematics, Hong Kong University of Science and Technology, Hong Kong
- 07/2023 Decisions, Operations and Technology, CUHK Business School, Hong Kong

06/2023 Statistics, East China Normal University, Shanghai, China
02/2023 Technology, Operations and Statistics, NYU Stern School of Business, New York, NY
11/2022 Technology, Operations and Statistics, NYU Stern School of Business, New York, NY
10/2022 Management, Krannert School of Management, Purdue University, West Lafayette, IN
10/2022 Statistics, University of Michigan, Ann Arbor, MI
02/2020 Statistics, University of Pittsburgh, Pittsburgh, PA
01/2020 Statistics and Applied Probability, UC Santa Barbara, CA
01/2020 Management, Purdue University, West Lafayette, IN

CONFERENCE PRESENTATIONS, INVITED SESSIONS

07/2026 Joint Conference on Statistics and Data Science, Guiyang, China
06/2026 International Symposium on Nonparametric Statistics, Thessaloniki, Greece
06/2026 ICSA Applied Statistics Symposium, Arlington, VA
05/2026 Annual POMS Conference, Reno, NV
05/2026 Annual Conference on Artificial Intelligence and Statistics (AISTATS), Tangier, Morocco
12/2025 Taipei International Statistical Symposium, Taipei
12/2025 Computational and Methodological Statistics (CMStatistics), London, UK
12/2025 Annual Conference on Neural Information Processing Systems (NeurIPS), San Diego, CA
10/2025 INFORMS Annual Meeting, Atlanta, GA
08/2025 Joint Statistical Meetings, Nashville, TN
07/2025 Joint Conference on Statistics and Data Science, Hangzhou, China
06/2025 ICSA China Conference, Zhuhai, China
06/2025 WNA/IMS Annual Meeting, Whistler, BC, Canada
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
08/2023 Joint Statistical Meetings, Toronto, Canada
07/2023 Joint Conference on Statistics and Data Science, Beijing, China
07/2023 ICSA International Conference, Hong Kong
06/2023 MSOM Conference 2023 SIG Meetings on Supply Chain Management, Montreal, Canada
12/2022 Capital of Statistics, Virtual
10/2022 INFORMS Annual Meeting, Indianapolis, IN
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 (AOS), Journal of the Royal Statistical Society: Series B (JRSSB), Journal of American Statistical Association (JASA), Journal of Econometrics (JOE), INFORMS Journal on Computing, Journal of Machine Learning Research (JMLR), Management Science (MS), Operations Research (OR), Annals of Applied Statistics (AOAS), Bernoulli, Information and Inference: A Journal of the IMA, Computational Optimization and Applications (COAP), Journal of Computational and Graphical Statistics (JCGS) , Statistical Analysis and Data Mining, 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: CSAMSE Best Paper Competition, 2024
MSOM Supply Chain Management Special Interest Group (SCM SIG), 2024

Scientific Program Committee: ICSA Applied Statistics Symposium, Arlington, VA, 2026

Workshop Organizer: Statistics and Optimization in Data Science Workshop, Purdue University, 2023

PhD Advisor:

Yu Gu, Quantitative Methods, Purdue University (Co-advised with Weibin Mo),
Zhihao Liu, Quantitative Methods, Purdue University (Co-advised with Weibin Mo),
Yafei Wang, Quantitative Methods, Purdue University,
Zhihong Liu, Quantitative Methods. Purdue University.

Doctoral Thesis Committee Member: (First Placement Listed in Parentheses)

He Li, Stern School of Business, New York University, 2022 (Citadel GQS)
Wenjie Li, Statistics, Purdue University, 2023 (Amazon Ads)
Qiyu Han, Quantitative Methods, Purdue University, 2024 (Walmart Global Tech)
Marcleo Cruz de Souza, Quantitative Methods, Purdue University, 2024, (Banco Central do Brasil)
Yaxin Fang, Statistics, Purdue University, 2024 (Stanford Postdoc)
Pangpang Liu, Quantitative Methods, Purdue University, 2025 (Yale Postdoc)
Wenbo Jing, Stern School of Business, New York University, 2025 (City University of Hong Kong)

TEACHING ACTIVITIES

Listed in the order of Course, Semester, Level, Title, Mean Score (in a 5.0 scale).

Daniels School of Business, Purdue University

MGMT590, Spring 2025, G (Online), Deep Learning,	4.79
MGMT590, Spring 2025, G, Machine Learning,	4.52
MGMT590, Spring 2025, G, Machine Learning,	4.53
MGMT475, Spring 2025, UG, Machine Learning for Business,	4.28
MGMT590, Spring 2024, G (Online), Deep Learning,	4.53

MGMT590, Spring 2024, G, Machine Learning,	4.38
MGMT590, Spring 2024, G, Machine Learning,	4.17
MGMT475, Spring 2024, UG, Machine Learning for Business,	4.64
MGMT590, Spring 2023, G (Online), Deep Learning,	4.51
MGMT590, Spring 2023, G, Machine Learning,	4.64
MGMT590, Spring 2023, G, Machine Learning,	4.15
MGMT475, Spring 2023, UG, Machine Learning for Business,	4.86
MGMT590, Spring 2022, G (Online), Deep Learning,	4.35
MGMT590, Spring 2022, G, Machine Learning,	4.17
MGMT590, Summer 2021, G, Machine Learning,	4.25
MGMT590, Summer 2021, G, Machine Learning,	3.94
MGMT473, Spring 2021, UG, Data Mining,	4.14
MGMT690, Fall 2020, G, Workshop in Analytics	

Daniels School of Business, Purdue University, Executive Education,
 Spring 2025, Eli Lilly Future Forward, Practical Integrations of AI in Business
 Spring 2024, Eli Lilly Future Forward

Stern School of Business, New York University

STAT-UB1, Spring 2019, UG, Statistics for Business Control,	4.80
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