MINGZHANG YIN

Last updated: December, 2025

Research areas: Quantitative Marketing ◇ Machine Learning ◇ Bayesian Statistics ◇ Causal Inference
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ACADEMIC APPOINTMENTS

Assistant Professor 2022 -
Marketing Department, Warrington College of Business
University of Florida

Postdoctoral Research Scientist 2020 - 2022
Data Science Institute, Columbia University
Advisor: Prof. David M. Blei

EDUCATION

Ph.D. in Statistics, The University of Texas at Austin 2015 - 2020
Advisor: Prof. Mingyuan Zhou

B.Sc. in Mathematics and Applied Mathematics, Fudan University 2011 - 2015

JOURNAL PUBLICATIONS

1. Mingzhang Yin, Claudia Shi, Yixin Wang, David M. Blei (2023). "Conformal Sensitivity Analysis for Individual Treatment Effects." *Journal of the American Statistical Association (Theory and Methods) (JASA).*
2. Mingzhang Yin, Yixin Wang, David M. Blei (2024). "Optimization-based Causal Estimation from Heterogenous Environments." *Journal of Machine Learning Research (JMLR)*
3. Mingzhang Yin, Ziwei Cong, Jia Liu (2025). "Unraveling Multifaceted User Preferences on Content Platforms: A Bayesian Deep Learning Approach." *Conditional Accept, Marketing Science.*
4. Ryan Dew, Nicolas Padilla, Lan E. Luo, Mingzhang Yin, et al. (2024). "Probabilistic Machine Learning: New Frontiers for Modeling Consumers and their Choices." *International Journal of Research in Marketing (IJRM).*
5. Ruijiang Gao, Mingzhang Yin, James Mcinerney, Nathan Kallus (2024). "Adjusting Regression Models for Conditional Uncertainty Calibration." *Machine Learning Journal (MLJ).*
6. Choudur Lakshminarayan and Mingzhang Yin (2020). "Topological Data Analysis in Digital Marketing." *Applied Stochastic Models in Business and Industry.*

PEER-REVIEWED CONFERENCE PUBLICATIONS

* = Equal contribution

7. Yang Zhao, Yixin Wang, Mingzhang Yin. "Permutative Preference Alignment from Listwise Ranking of Human Judgments." *Empirical Methods in Natural Language Processing (EMNLP), 2025.*
8. Ruijiang Gao, Mingzhang Yin, Maytal Saar-Tsechansky "SEL-BALD: Deep Bayesian Active Learning with Selective Labels." *Conference on Neural Information Processing Systems (NeurIPS), 2024.*
9. Ruijiang Gao and Mingzhang Yin. Confounding-Robust Deferral Policy Learning. *AAAI Conference on Artificial Intelligence (AAAI), 2024.*

10. Mingyuan Zhou, Huangjie Zheng, Zhendong Wang, Mingzhang Yin, Hai Huang "Score identity Distillation: Exponentially Fast Distillation of Pretrained Diffusion Models for One-Step Generation." *International Conference on Machine Learning (ICML), 2024.*

11. Zhendong Wang*, Ruijiang Gao*, Mingzhang Yin*, Mingyuan Zhou, David M. Blei. "Probabilistic Conformal Prediction Using Conditional Random Samples." Short version accepted by *DFUQ Workshop,* ***Spotlight Paper****, ICML 2022. International Conference on Artificial Intelligence and Statistics (AISTATS), 2023.*

12. Russell Z Kunes, Mingzhang Yin, Max Land, Doron Haviv, Dana Pe'er, Simon Tavaré. "Gradient Estimation for Binary Latent Variables via Gradient Variance Clipping." *AAAI Conference on Artificial Intelligence (AAAI), 2022.*

13. Wenshuo Guo, Mingzhang Yin, Yixin Wang, Michael I. Jordan. "Partial Identification with Noisy Covariates: A Robust Optimization Approach." *Conference on Causal Learning and Reasoning (CLeaR), 2021.*

14. Mingzhang Yin, George Tucker, Mingyuan Zhou, Sergey Levine and Chelsea Finn. "Meta-Learning without Memorization." *International Conference on Learning Representations (ICLR),* ***Spotlight Paper, 6.3%****, 2020.*

15. Yuguang Yue, Yunhao Tang, Mingzhang Yin and Mingyuan Zhou. "Discrete Action On-Policy Learning with Action-Value Critic." *International Conference on Artificial Intelligence and Statistics (AISTATS), 2020.*

16. Mingzhang Yin, YX Rachel Wang and Purnamrita Sarkar. "A Theoretical Case Study of Structured Variational Inference for Community Detection." *International Conference on Artificial Intelligence and Statistics (AISTATS), 2020.*

17. Siamak Zamani Dadaneh, Shahin Boluki, Mingzhang Yin, Mingyuan Zhou and Xiaoning Qian. "Pairwise Supervised Hashing with Bernoulli Variational Auto-Encoder and Self-Control Gradient Estimator." *The Conference on Uncertainty in Artificial Intelligence (UAI), 2020*

18. Mingzhang Yin*, Yuguang Yue* and Mingyuan Zhou. "ARSM: Augment-REINFORCE-Swap-Merge Estimator for Gradient Backpropagation Through Categorical Variables." *International Conference on Machine Learning (ICML) 2019.*

19. Mingzhang Yin and Mingyuan Zhou. "ARM: Augment-REINFORCE-Merge Gradient for Stochastic Binary Networks." *International Conference on Learning Representations (ICLR), 2019.*

20. Mingzhang Yin and Mingyuan Zhou. "Semi-implicit Variational Inference." ***Long Talk, 2.8%****, International Conference on Machine Learning (ICML), 2018.*

21. Mingzhang Yin and Mingyuan Zhou. "Semi-Implicit Generative Model." *Bayesian Deep Learning Workshop, NeurIPS 2018.*

22. Bowei Yan, Mingzhang Yin and Purnamrita Sarkar. "Convergence of Gradient EM for Multi-component Gaussian Mixture." *Conference on Neural Information Processing Systems (NeurIPS) 2017.*

PAPERS IN SUBMISSION

- Mingzhang Yin, Khaled Boughanmi, Anirban Mukherjee. "Modeling Dynamic Consumer Preferences from Few-shot Data: A Meta-Learning Approach." Major Revision, Journal of Marketing Research.
- Alain Lemaire Mingzhang Yin, Oded Netzer. "Words That Matter: Analyzing the Causal Effect of Words." Major Revision, Journal of Marketing Research.
- Mingzhang Yin, Ruijiang Gao, Ziwei Cong. "Personalizing Language Models for Generative Targeting." Reject and Resubmit. Marketing Science.
- Sang Kyu Park, Yang Yang, Mingzhang Yin, Sujin Park, "Inflation Blind Spot: Consumers Overlook the Impact of Inflation on Businesses." In Submission.

- Luhuan Wu, Mingzhang Yin, Yixin Wang, John Patrick Cunningham, David Blei. "Bayesian Invariance Modeling of Multi-Environment Data." In submission.
- Mingzhang Yin, Nhat Ho, Bowei Yan, Xiaoning Qian, Mingyuan Zhou. "Probabilistic Best Subset Selection via Gradient-Based Optimization." In submission; arXiv 2006.06448, 2022.

RECENT TALKS/PRESENTATIONS

- "Personalizing Language Models from Modeling Customers", Conference on AI, Machine Learning, and Business Analytics, Columbia University Dec. 2025
- "Confounding-Robust Policy Improvement with Human-AI Teams", Marketing Science Conference, Washington DC Jun. 2025
- "Meta-Learning Customer Preference Dynamics for Fast Customization on Digital Platforms", Invited Talk at Marketing Seminar, Cornell University Feb. 2025
- "Optimization-based Causal Estimation from Heterogeneous Environments", Conference on AI, Machine Learning, and Business Analytics, Yale University Dec. 2024
- "Causal Optimization: Aligning Prediction and Causal Estimation in Machine Learning", Center for Causal Inference, University of Pennsylvania Oct. 2024
- "Understanding Consumers Fast: Meta-learned Temporal Processes for Modeling Consumption Dynamics", Marketing Science Conference, Sydney, Australia Jun. 2024
- "Meta-Learning Customer Preference Dynamics on Digital Platforms", Marketing Dynamics Conference, Santorini, Greece Jun. 2024
- Invited talk. "Estimating Individual Treatment Effects under Unmeasured Confounding", Department of Biostatistics, University of Florida Oct. 2023
- "Modeling Customer Journey with Meta-Temporal Processes", Choice Symposium, Fontainebleau, France Aug. 2023
- Invited talk. "Causal Inference in Personalization and Targeting", Criteo AI Lab, Paris Aug. 2023
- Invited talk. "Causal Machine Learning for Individual Treatment Effects", AI2Heal Datathon, University of Florida Jan. 2023
- Invited talk. "Conformal Sensitivity Analysis for Individual Treatment Effects", Statistics Seminar, University of Florida Oct. 2022
- Invited talk. "Conformal Sensitivity Analysis for Individual Treatment Effects", IROM Seminar, University of Texas at Austin Oct. 2022
- Invited talk. "Partial Identification of Causal Effects via a Modern Optimization Lens", Econometrics Seminar, Boston University Mar. 2022
- Colloquium talk. Department of Quantitative Theory & Methods, Emory University Feb. 2022
- Colloquium talk. Warrington College of Business, University of Florida Jan. 2022
- Colloquium talk. Department of Statistics, Texas A&M University Jan. 2022
- Colloquium talk. Department of Statistics, Iowa State University Jan. 2022
- Colloquium talk. University of Notre Dame, Department of Applied and Computational Mathematics and Statistics Jan. 2022
- Colloquium talk. University of Iowa, Tippie College of Business Dec. 2021

- Invited talk. "Machine Learning with Heterogeneous Datasets", Machine Learning Seminar, Microsoft Research, Cambridge, MA Oct. 2021
- Invited talk. "Semi-Implicit Variational Inference" *AI/ML Seminar Series*, Center for Machine Learning and Intelligent Systems, University of California, Irvine Feb. 2020
- Invited talk. "The Big Problem with Meta-Learning and How Bayesians Can Fix It, *Bayesian Deep Learning Workshop*, Vancouver Dec. 2019
- Short presentation. "Efficient Discrete Optimization with Correlated Samples", *ICML*, Long Beach June 2019
- Seminar talk. "Antithetic Sampling and Control Variates in Learning Binary Networks", *UT Austin Statistics Seminar*, Austin Dec. 2018
- Long presentation. "Black-box Variational Inference and Uncertainty Estimation", *ICML*, Stockholm July 2018

AFFILIATION

Department of Statistics (courtesy) 2022 -

Artificial Intelligence Academic Initiative (AI^2) Center 2023 -

Member of Intelligent Critical Care Center (IC^3) 2024 -

PROFESSIONAL EXPERIENCE

Research Intern, Google Research, Brain Team, Mountain View, CA May 2019–Nov 2019
Supervisor: Drs. George Tucker and Chelsea Finn

Research Intern, Quantlab Financial LLC, Houston, TX Jun. 2017–Aug. 2017
Supervisor: Dr. Joe Masters

Data Science Intern, HP Lab, Austin, TX Jun. 2016–Aug. 2016
Supervisor: Dr. Lakshminarayan Choudur

SERVICE

Area Chair: AISTATS 2023, 2024, 2025
Conference reviewing: NeurIPS 2017–2025; ICML 2019–2024; ICLR 2018–2024; AISTATS 2018, 2021; UAI 2019–2023; ACML 2018; AAAI 2018

Journal reviewing: Journal of the American Statistical Association, Marketing Science, Journal of Machine Learning Research, Marketing Science, Annals of Applied Statistics, Journal of Computational and Graphical Statistics, IEEE Transactions on Pattern Analysis and Machine Intelligence, Transactions on Machine Learning Research, IEEE Trans. Signal Process, International Journal of Research in Marketing, Production and Operations Management

Session Chair: Session of "Probabilistic Machine Learning on Unstructured Data" at ICSA 2023. Session of "Advances in Causal AI for Marketing Interventions" at Marketing Science, 2025.

Grant reviewing: Israel Science Foundation, 2024

Member: American Statistical Association (ASA), 2015–present; International Society for Bayesian Analysis (ISBA), 2016–2022; International Chinese Statistical Association (ICSA), 2021–2024. INFORMS & ISMS membership, 2023–present.

TEACHING AND ADVISING EXPERIENCE

Instructor, Machine Learning in Business (Ph.D. level)	Spring 2026
Instructor, Marketing Analytics II (Master's level)	Spring 2023, 2024, 2025
Teaching Assistant, Introduction to Probability and Statistics	Fall 2017, Fall 2019
Teaching Assistant, Bayesian Statistical Methods	Spring 2016, Spring 2017
Teaching Assistant, Statistics in Market Analysis	Fall 2015, Spring 2016, Spring 2018
Teaching Assistant, Design and Analysis of Experiments	Spring 2017
Teaching Assistant, Linear Algebra	Fall 2018
Teaching Assistant, Bayesian deep learning	Spring 2019
Undergraduate Mentorship, Directed Reading Program, UT Math Department	Fall 2018, Spring 2019

SELECTED AWARDS AND HONORS

Marketing Science Institute Research Grant	2025
Best Paper Award Runner-up, Workshop on Information Technologies and Systems (WITS)	2024
KAUST Rising Star in AI	2023
Graduate School Professional Development Award	2017, 2019
Google Archimedes Award	2019
The Graduate Continuing Bruton Fellowship	2018, 2019
Travel Award, ICLR	2019
Travel Award, ICML	2018, 2019
Travel Award, NeurIPS	2017