
Contact Information	<i>Phone:</i> +1 (765) 494-4855 <i>Email:</i> harrymok@purdue.edu <i>Website:</i> sites.google.com/view/weibin-mo	
Appointment	School of Business, Purdue University <i>West Lafayette, IN, USA</i> <u>Assistant Professor</u> (Tenure-Track)	June 2022 - Current
Education	University of North Carolina at Chapel Hill <i>Chapel Hill, NC, USA</i> <u>Ph.D.</u> in Statistics Advisor: Yufeng Liu Dissertation: Efficiency and Robustness in Individualized Decision Making	May 2021
	Nankai University <i>Tianjin, China</i> <u>B.B.A.</u> in Business Administration <u>B.S.</u> in Mathematics	June 2016
Research Interests	<ul style="list-style-type: none"> • Statistical machine learning and reinforcement learning • Personalized decision marking • Causal inference and semiparametric inference • Robust optimization 	
Publications	<p><u>Journal</u></p> <ol style="list-style-type: none"> 1 Mo, W., and Liu, Y. (2022). Efficient learning of optimal individualized treatment rules for heteroscedastic or misspecified treatment-free effect models. <i>Journal of the Royal Statistical Society: Series B (Statistical Methodology)</i>, 84(2): 440-472. DOI: 10.1111/rssb.12474. 2 Mo, W.*, Qi, Z.* , and Liu, Y. (2021). Learning optimal distributionally robust individualized treatment rules (with discussion and our rejoinder). <i>Journal of the American Statistical Association</i>, <ul style="list-style-type: none"> • (main paper) 116(533): 659-674, DOI: 10.1080/01621459.2020.1796359; • (rejoinder) 116(533): 699-707, DOI: 10.1080/01621459.2020.1866581. <p><u>Conference Proceeding</u></p> <ol style="list-style-type: none"> 1 Dong, J., Mo, W., Qi, Z., Shi, C., Fang, X., and Tarokh, V. (2023). PASTA: Pessimistic Assortment Optimization. In <i>International Conference on Machine Learning (ICML) 2023</i>. 2 Mo, W., Yu, H., and Liu, C. (2021). Markdown first reinforcement learning pricing with demand learning. In <i>Amazon Machine Learning Conference 2021</i>. <p><u>Book Chapter</u></p> <ol style="list-style-type: none"> 1 Mo, W., and Liu, Y. (2022+). A Selective Review of Individualized Decision Making. In <i>Precision Medicine: New Methods and Applications</i>. To appear. 2 Mo, W., and Liu, Y. (2021). Supervised learning. In <i>Wiley StatsRef: Statistics Reference Online</i> (eds N. Balakrishnan, T. Colton, B. Everitt, W. Piegorisch, F. Ruggeri and J.L. Teugels), DOI: 10.1002/9781118445112.stat08302. 	

*The authors have equal contributions.

Teaching

Instructor

Purdue University

- MGMT 30500 (Business Statistics): Spring 2023.
- MGMT 69000 (Causal Inference and Semi-Parametric Inference, PhD): [Fall 2022](#).

Teaching Assistance

University of North Carolina at Chapel Hill

- STOR 555 (Mathematical Statistics): Fall 2016.
- STOR 556 (Applied Time Series): Spring 2017.
- STOR 565 (Machine Learning): Spring 2018, Fall 2020.
- STOR 612 (Models in Operations Research, graduate): Fall 2017.
- STOR 635 (Probability, graduate): Spring 2018.
- STOR 767 (Machine Learning, graduate): Spring 2019.
- Introduction to Statistical Machine Learning Using R, 2019 Data Matters (<https://datamatters.org>).

Honors

Excellence in Teaching Assistance and Instruction Award

Dec. 2020

Department of Statistics and Operations Research, UNC-Chapel Hill

Student Paper Competition Winner

Aug. 2020

Statistical Learning and Data Science Section, American Statistical Association

Cambanis-Hoeffding-Nicholson Award

Dec. 2017

Department of Statistics and Operations Research, UNC-Chapel Hill

(for outstanding academic performance during first year of Ph.D. studies)

Presentations

- 1 “Efficient Learning for Personalized Decision Making”, 15th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics) (London, United Kingdom), Dec. 2022.
- 2 “Efficient Learning for Personalized Decision Making”, INFORMS Annual Meeting (Indianapolis, IN), Oct. 2022.
- 3 “Efficient Learning of Optimal Individualized Treatment Rules”, Center for Data Science, Zhejiang University (Hangzhou, ZJ, China), Oct. 2022.
- 4 “Learning Optimal Distributionally Robust Individualized Treatment Rules”, the Fifth ICSCA-Canada Chapter Symposium (Banff, AB, Canada), Jul. 2022.
- 5 “Markdown First Reinforcement Learning Pricing with Demand Learning” (poster), Amazon Machine Learning Conference (virtual), Oct. 2021.
- 6 “Learning Optimal Distributionally Robust Individualized Treatment Rules” (contributed talk), Joint Statistical Meetings (virtual), Aug. 2020.
- 7 “Variance-Regularized Policy Learning” (poster), Statistical and Computational Challenges in Precision Medicine Workshop (Minneapolis, MN), Nov. 2018.
- 8 “Recent Development in Dynamic Treatment Regime” (poster), Conference on Statistical Learning and Data Science / Nonparametric Statistics (New York, NY), June 2018.

Academic Services

Reviewers for *Journal of the American Statistical Association*, *Journal of Multivariate Analysis*, the *Canadian Journal of Statistics*, the *Annals of Applied Statistics*, and *Stat*.

Industrial Experience

Amazon

May 2020 - Aug. 2020; June 2021 - June 2022

Seattle, WA, USA

Applied Scientist in Supplied Chain Optimization Technologies (SCOT)

Developed machine learning methodologies and algorithms for pricing and inventory management

SAS

June 2019 - Aug. 2019

Cary, NC, USA

Graduate Statistical Intern in R&D Organization

Statistical programming for SAS procedures

Boehringer Ingelheim Pharmaceuticals

May 2017 - July 2017

Ridgefield, CT, USA

Biostatistician Intern in Clinical Trial

Post-hoc research on clinical trials for respiratory disease

**Volunteer
Experience**

Clover Youth

Sep. 2012 - Feb. 2014

Guangzhou, Guangdong, China

Project Assistant, Human Resource Manager in Summer Camp Program

Supported migrant children development via peer-led programs