Luhao Zhang

Positions

Columbia University, New York, NY, USA

Sep 2023 -

Aug 2018 - Aug 2023

Postdoctoral Research Scientist, Department of IEOR

Mentor: Xunyu Zhou

EDUCATION

The University of Texas at Austin, Austin, TX, USA

Ph.D. in Mathematics

Advisor: Thaleia Zariphopoulou

Xi'an Jiaotong University, Xi'an, Shaanxi, China

B.S. in Mathematics and Applied Mathematics (Honors Program) Aug 2014 - June 2018 Special Class for the Gifted Young

Research

Publications

Papers

1. Luhao Zhang, Jincheng Yang, Rui Gao. Optimal Robust Policy for Feature-Based Newsvendor (2022), *Management Science*, forthcoming.

Preprints

- 2. Luhao Zhang, Jincheng Yang, Rui Gao. A Simple and General Duality Proof for Wasserstein Distributionally Robust Optimization.
- 3. Renyuan Xu, Thaleia Zariphopoulou, Luhao Zhang. Decision Making under Costly Sequential Information Acquisition: the Paradiqm of Reversible and Irreversible Decisions.
- 4. Jincheng Yang, Luhao Zhang, Ningyuan Chen, Rui Gao, Ming Hu. Decision-making with Side Information: A Causal Transport Robust Approach.

Conference papers

5. Luhao Zhang, Mohsen Ghassemi, Ivan Brugere, Alan Mishler, Niccolo Dalmasso, Vamsi Potluru, Tucker Balch, Manuela Veloso. Conditional Demographic Parity Through Optimal Transport (2022), accepted by **NeurIPS** Workshop on Algorithmic Fairness through the Lens of Causality and Privacy.

Industry

J.P.Morgan Chase, AI Research, New York, NY

EXPERIENCE AI Researcher (Intern)

June - Aug 2022

- Developed an efficient algorithm to achieve conditional demographic parity using causal transport distance
- Preliminary results accepted by NeurIPS Workshop on Algorithmic Fairness through the Lens of Causality and Privacy

Award	Frank Gerth III Teaching Excellence Award, UT Austin	2021
	Selected to present at the Cornell ORIE Young Researchers Workshop	Summer 2021
	Graduate School Summer Fellowship, UT Austin,	Summer 2021
	Graduate Continuing Bruton Fellowship, UT Austin,	Spring 2022
	Professional Development Award, UT Austin,	Spring, Fall 2022
Invited Talks	• Robust Optimization Webinar Series	May 2021
	• International Conference of the Chinese Scholars Association for Management Science and	
	Engineering (CSAMSE), Shanghai Jiaotong University	July 2021
	• Cornell ORIE Young Researchers Workshop, Ithaca, NY	Oct 2021
	• INFORMS Annual Meeting, Anaheim, CA	Oct 2021
	• Conference on Artificial Intelligence, Machine Learning, and Business Analytics, Rutgers	
	University	Dec 2021
	• Texas Women in Math Symposium, Rice University	Feb 2022
	• INFORMS Optimization Society Conference, Greenville, SC	March 2022
	• SIAM Annual Meeting, Pittsburgh, PA	July 2022
	• INFORMS Annual Meeting, Indianapolis, IN	Oct 2022
Professional	Referee	
Service	Mathematical Programming	
	• Operations Research	
	Management Science	
	• 3rd ACM International Conference on AI in Finance	
	Session Chair	
	• INFORMS 2021 invited session of Learning and Decision-making with Contextual Information	
	tion	
	• INFORMS 2022 invited session of Data-driven Decision Making	
MENTORSHIP	Directed Reading Program	

$\bullet\,$ Sonali Singh, on the topic of $Stochastic\ Calculus\ for\ Finance$

• Yuxiang Gao, on the topic of Elements of Statistical Learning

Spring 2020 • Wenxuan Jiang, on the topic of Stochastic Calculus for Finance Fall 2021 • Haoze Yan, on the topic of Stochastic Programming Spring, Fall 2022

Spring 2022