

Luhao Zhang

CONTACT	Department of Mathematics, PMA 8.100	✉: luhaozhang@math.utexas.edu
INFORMATION	2515 Speedway Stop C1200 Austin, TX 78712-1202, USA	🏠: web.ma.utexas.edu/users/luhaozhang/ ☎: +1 (737) 270-5656
RESEARCH AREA	Stochastic and robust optimization, Data-driven decision-making under uncertainty, Machine learning	
EDUCATION	The University of Texas at Austin , Austin, TX, USA	
	Ph.D. in Mathematics	Aug 2018 - May 2023
	Advisor: Thaleia Zariphopoulou	
	Committee Member: Rui Gao , Irene M. Gamba, Mihai Sirbu, Stathis Tompaidis	
	Xi'an Jiaotong University , Xi'an, Shaanxi, China	
	B.S. in Mathematics and Applied Mathematics (Honors Program)	Aug 2014 - 2018
	<i>Special Class for the Gifted Young</i>	
RESEARCH PAPERS	Publications	
	<ol style="list-style-type: none">1. Luhao Zhang, Jincheng Yang, Rui Gao. <i>Optimal Robust Policy for Feature-Based Newsvendor</i> (2022), Management Science, forthcoming.2. Luhao Zhang, Mohsen Ghassemi, Ivan Brugere, Alan Mishle, Niccolo Dalmaso, Vamsi Potluru, Tucker Balch, Manuela Veloso. <i>Conditional Demographic Parity Through Optimal Transport</i> (2022), NeurIPS Workshop on Algorithmic Fairness through the Lens of Causality and Privacy.	
	Preprints	
	<ol style="list-style-type: none">3. Luhao Zhang, Jincheng Yang, Rui Gao. <i>A Simple and General Duality Proof for Wasserstein Distributionally Robust Optimization</i> (2022), under review for Management Science (fast track).4. Jincheng Yang*, Luhao Zhang*, Ningyuan Chen, Rui Gao, Ming Hu. <i>Decision-making with Side Information: A Causal Transport Robust Approach</i> (2022), to be submitted to Operations Research.5. Renyuan Xu*, Thaleia Zariphopoulou*, Luhao Zhang*. <i>Decision Making with Learning and Opportunity to Reverse</i> (2022), to be submitted to Operations Research.	
	* indicates alphabetical order	

INDUSTRY	J.P.Morgan Chase, AI Research , New York, NY		
EXPERIENCE	<i>AI Researcher (Intern)</i>		Jun - Aug 2022
	<ul style="list-style-type: none"> Developed an efficient algorithm to achieve conditional demographic parity using causal transport distance Preliminary result accepted by <i>NeurIPS Workshop on Algorithmic Fairness through the Lens of Causality and Privacy</i> 		
SELECTED	Frank Gerth III Teaching Excellence Award, UT Austin		2021
AWARD	Selected to present at the Cornell ORIE Young Researchers Workshop		2021
INVITED TALKS	Optimal Robust Policy for Feature-Based Newsvendor		
	• 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
	Decision Making with Learning and Opportunity to Reverse		
	• SIAM Annual Meeting, Pittsburgh, PA		Jul 2022
	• INFORMS Annual Meeting, Indianapolis, IN		Oct 2021
TEACHING	UT Austin, Teaching Assistant		
EXPERIENCE	• M378K <i>Introduction to Mathematical Statistics</i> 4.0/5.0		Spring, Fall 2022
	• M408K <i>Differential Calculus</i> 4.5/5.0		Spring 2021
	• M358K <i>Applied Statistics</i> 4.0/5.0		Fall 2021
	• M362K <i>Probability</i> 4.3/5.0		Fall 2020
	• MF325K <i>Discrete Mathematics</i> 4.3/5.0		Summer 2020
	• M427L <i>Advanced Calculus for Applications II</i> 4.1/5.0		Spring 2020
	• M348 <i>Scientific Computation in Numerical Analysis</i> N/A		Spring, Fall 2019
	• M408D <i>Sequences, Series, and Multivariable Calculus</i> 4.2/5.0		Fall 2018

PROFESSIONAL
SERVICES

Referee

- Mathematical Programming
- ACM International Conference on AI in Finance

Session Chair

- INFORMS 2021 invited session of Learning and Decision-making with Contextual Information
- INFORMS 2022 invited session of Data-driven Decision Making

OUTREACH

Directed Reading Program Mentor

- Sonali Singh, on the topic of *Stochastic Calculus for Finance* Spring 2020
- Wenxuan Jiang, on the topic of *Stochastic Calculus for Finance* Fall 2021
- Haoze Yan, on the topic of *Lectures on Stochastic Programming* Spring, Fall 2022
- Yuxiang Gao, on the topic of *Elements of Statistical Learning* Spring 2022

REFERENCES

Rui Gao

Department of Information, Risk, and Operations Management
The University of Texas at Austin
E-mail: rui.gao@mcombs.utexas.edu

Renyuan Xu

Epstein Department of Industrial and Systems Engineering
University of Southern California
E-mail: renyuanx@usc.edu

Thaleia Zariphopoulou

Department of Mathematics
The University of Texas at Austin
E-mail: zariphop@math.utexas.edu