MINGXI ZHU

Personal Website : https://sites.google.com/view/mingxizhu
800 W Peachtree St NW, Atlanta, GA 30332
Tel: +1-984-209-6100; Email: mingxi.zhu@scheller.gatech.edu

RESEARCH INTERESTS

I am interested in developing tools and methodologies for effective information and data acquisition, information processing and data sharing polices in the context of online platforms where multiple agents interact, with specific applications in machine learning, pricing/mechanism design and empirical analysis.

ACADEMIC POSITIONS

Scheller College of Business, Georgia Institute of Technology, Atlanta, GA, United States
2023 - present
Assistant Professor of Information Technology Management

EDUCATION

Stanford University, Stanford, CA, United States 2017 - 2023
Ph.D. in Operations, Information & Technology, Advisor: *Prof. Haim Mendelson, Prof. Yinyu Ye*

Duke University, Durham, NC, United States 2015 - 2017
M.A. in Economics, Advisor: *Prof. Peng Sun*

Beijing Foreign Studies University, Beijing, China 2011 - 2015
B.A. in English Literature, B.Ec. in Economics

RESEARCH PAPERS

Managing Randomization in the Multi-Block Alternating Direction Method of Multipliers for Quadratic Optimization
Joint Work with Kresimir Mihic and Yinyu Ye

· Published on *Mathematical Programming Computation, 2020*, available at *springer.com/journal/12532*

How Small Amount of Data Sharing Benefits Distributed Optimization and Learning
Joint Work with Yinyu Ye

· Best Paper Award at *"The Benefits of Higher-Order Optimization in Machine Learning" NeurIPS workshop*, 2022; and *Modern Techniques of Very Large Scale Optimization*, 2022, Edinburgh, U.K.
· To be submitted to *Mathematical Programming*, available at *arxiv.org/abs/2208.09735*

Dynamic Exploration and Exploitation : The Case of Online Lending
Joint Work with Haim Mendelson

· To be submitted to *Operations Research*, available upon request
· Presented at *MSOM*, 2021, Bloomington, IN, US.

Managing Information Disclosure : An Empirical Analysis of a Search Advertising Market with Non-Strategic Behaviors
Joint Work with Michelle Song

- To be submitted to *Marketing Science*, available at gsb.stanford.edu/paper-or-publication/Auction.pdf
- Presented at *Theory and Practice in Marketing Conference*, 2022, Atlanta, GA, US.

Near-Optimal Dynamic Pricing in Large Networks
Joint Work with Ozan Candogan and Yuwei Luo

- *Working Paper.* Presented at *Conference on Network Science and Economics*, 2022, Chicago, IL, US; and *Informs Revenue Management and Pricing Conference*, 2022, Chicago, IL, U.S.

PROJECTS

Santa Clara COVID Reopen Project

- We use SEIR model to predict the number of infections at Santa Clara County under different reopening policies and provide policy suggestions. Code available at github.com/mingxiz/covid_reopen_matlab

TEACHING EXPERIENCE

- **Teaching Instructor**, MS &E 211X, Introduction to Optimization, Autumn 2021
  - Design and lead sessions on Introduction to Optimization Solver, with evaluation of 4.52/5.00
- **Teaching Assistant**, OIT 356, Electronic Business (MBA Elective), Spring 2018, 2020, 2021
  - Develop case studies on Meituan and DiDi
- **Teaching Assistant**, OIT 652, Modeling, Spring 2021
- **Instructor**, Math Camp for Duke economics master students, Summer 2016

SERVICES

- **Journal Referee**, *Management Science*, *Mathematics of Operations Research*
- **Advisor**, Stanford MS&E Undergraduate Diversity in Research Program

FELLOWSHIPS AND HONORS

- **Stanford University**
  - The Institutional Venture Partners Fellowship Fund, 2020 - 2021
  - The David S. Tappan Jr. Fellowship Fund, 2019 - 2020
  - The Robert J. and Doreen D. Marshall Scholarship Fund, 2018 - 2019
  - George A. and Barbara Cull Jedenoff Fellowship, 2017 - 2018
- **Duke University**
  - Duke Economics Master Program Merit Awards, 2015 - 2017
- **Beijing Foreign Studies University**
  - Chinese National Scholarship (top 1%), 2012 - 2015

TECHNICAL STRENGTHS

- **Programming Techniques** Python, MATLAB, LaTeX