RESEARCH INTERESTS

I am interested in developing large scale optimization algorithms to facilitate online platforms revenue management, with applications in machine learning, pricing, and empirical operations management.

EDUCATION

Stanford University, Stanford, CA, United States 2017 - present  
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

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

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.

Information Disclosure in Generalized Second Price Auction: An Empirical Analysis of an Online Advertising Market with Heterogeneous Advertisers  
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**, *Mathematics of Operations Research, Computational Statistics and Data Analysis*
- **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

MISCELLANEOUS

- Stanford GSB GCBC (Greater China Business Club) board member
- Duke EMAC (Economics Master Program Council) member, 2016 - 2018
- Power forward and starter of Beijing Foreign Studies University Female Basketball Team, 2012 - 2015

REFERENCES

- **Haim Mendelson**
  - Professor of Electronic Business and Commerce, and Management
  - Stanford University, Graduate School of Business
• haim@stanford.edu, +1-650-725-8927

• **Yinyu Ye**
  • K. T. Li Professor of Engineering
  • Stanford University, Management Science & Engineering
  • yyye@stanford.edu, +1-650-723-7262