Xiao Lei Updated May 8, 2022

Contact Information 333 S.W. Mudd Building Columbia University

 $500~\mathrm{W}~120\mathrm{th}~\mathrm{Street}$ New York, NY 10027 Phone: (646) 637-3569 Email: xl2625@columbia.edu

Homepage: http://www.columbia.edu/~x12625

Research Interests online marketplaces, revenue management and pricing, video game analytics, social operations management, customer choice modelling

EDUCATION

Columbia University

New York, NY

Ph.D. Candidate in Operations Research

• Advisor: Adam Elmachtoub

M.S. in Operations Research

Feb 2018

(expected) Jun 2022

University of International Business and Economics

B.S. in Financial Engineering

Beijing, China

Jun 2016

Working Papers

"Matchmaking Strategies for Maximizing Player Engagement in Video Games", with Mingliu Chen and Adam Elmachtoub. Major revision at Operations Research.

Accepted to The 23th ACM Conference on Economics and Computation (EC'22).

"Herding, Learning and Incentives for Online Reviews", with Rajeev Kohli and Yeqing Zhou.

PUBLISHED PAPERS "Price Discrimination with Fairness Constraints", with Maxime Cohen and Adam Elmachtoub. Management Science, forthcoming.

- Spotlight presentation at INFORMS RMP Conference 2021.
- Accepted to The ACM Conference on Fairness, Accountability, and Transparency (FAccT'21).
- Oral presentation at The 4th Workshop on Mechanism Design for Social Good (MD4SG'20).

"Loot Box Pricing and Design", with Ningyuan Chen, Adam Elmachtoub and Michael Hamilton. Management Science (2021).

- Third Prize, Chinese Scholars Association for Management Science and Engineering (CSAMSE) Best Paper Award 2021.
- First Place, 2019 IBM Best Student Paper Award (INFORMS Service Science).
- Accepted to The 21th ACM Conference on Economics and Computation (EC'20).
- Invited to present at the Federal Trade Commission (FTC) Workshop on Consumer Issues Related to Loot Boxes, 2019 (one of four research papers selected).

"Pricing of Reusable Resources under Ambiguous Distributions of Demand and Service Time with Emerging Applications", joint with Vinh Xuan Doan and Sigian Shen. European Journal of Operational Research (2020).

"Dynamic Pricing and Learning with Competition: Insights from the Dynamic Pricing Challenge at the 2017 INFORMS RM & Pricing Conference", with Ruben van de Geer, Arnoud V. den Boer, Christopher Bayliss, Christine S. M. Currie, Andria Ellina, Malte Esders, Alwin Haensel, Kyle D. S. Maclean, Antonio Martinez-Sykora, Asbjørn Nilsen Riseth, Fredrik Ødegaard and Simos Zachariades. Journal of Revenue and Pricing Management (2019).

"Stochastic Maximum Flow Interdiction Problems under Heterogeneous Risk Preferences", with Siqian Shen and Yongjia Song. *Computers & Operations Research* (2018).

Honors and Awards

Third Prize, Chinese Scholars Association for Management Science and Engineering (CSAMSE) Best Paper Award, 2021

Cheung-Kong Innovation Doctoral Fellowship (for research in new economy), 2021

Columbia Deming Doctoral Fellowship (for data-driven research), 2020

First Place, IBM Best Student Paper Award (INFORMS Service Science), 2019

First Place, Dynamic Pricing Challenge of INFORMS RMP Conference, 2017

TEACHING EXPERIENCE

Columbia University

Instructor

• Graph Theory by Example, Columbia Science Honors Program: Fall 2020, Spring 2021

Teaching Assistant

- IEOR 4701 Stochastic Models for Financial Engineering (core course for MS in Financial Engineering): Spring 2021
- IEOR 4650 Business Analytics (core course for MS in Business Analytics): Fall 2020
- IEOR 4004 Optimization Models and Methods (core course for MS in Operations Research): Fall 2018.
- DROM 8816 Quantitative Pricing and Revenue Analytics (elective for MBA): Fall 2018.

Professional Experience

Activision Blizzard Data Science Intern

New York, NY Summer 2020

KPMG Consulting

Beijing, China

Consultant

Summer 2018

ACADEMIC SERVICES

Ad-hoc reviewer for Management Science, Operations Research, Manufacturing & Service Operations Management, Production and Operations Management, European Journal of Operational Research.

Program Committee Member for Fairness, Accountability, and Transparency (FAccT) (2022).

INVITED TALKS

Video Game Analytics

• Lee Kong Chian School of Business, Singapore Management University	Feb 2022
• Department of System Engineering and Engineering Management, CUHK	Feb 2022
• School of Data Science, CUHK-Shenzhen	Feb 2022
• HKU Business School, University of Hong Kong	Feb 2022
• NUS Business School, National University of Singapore	Feb 2022
• Naveen Jindal School of Management, UT Dallas	Feb 2022
• New York University Shanghai	Jan 2022
• Ross School of Business, University of Michigan, Ann Arbor	Jan 2022
• MIT Sloan School of Management	Jan 2022
• Department of Industrial Engineering and Decision Analytics, HKUST	Dec 2021
• The Wharton School of the University of Pennsylvania	Dec 2021
• HKUST Business School, HKUST	Dec 2021

 Matchmaking Strategies for Maximizing Player Engagement in Video Games Riot Games, virtual Activision, Santa Monica, CA NetEase Games (Thunder Fire UX Research Center), Hangzhou, China ByteDance (Nuverse Games), Beijing, China 	Nov 2021 Nov 2021 Jul 2021 May 2021
 Cot Box Pricing and Design CSAMSE Annual Conference INFORMS Revenue Management & Pricing Conference MSOM Annual Conference Trans-Atlantic Doctoral Conference, London Business School The 21th ACM Conference on Economics and Computation (EC'20) Tsinghua University, School of Economics and Management, Beijing, China INFORMS Annual Conference, Seattle, WA 	Jul 2021 Jun 2021 Jun 2021 May 2021 Jul 2020 Dec 2019 Oct 2019
 Price Discrimination with Fairness Constraints INFORMS Revenue Management & Pricing Conference MSOM Annual Conference POMS Annual Conference Tsinghua University, School of Economics and Management, Beijing, China The 4th ACM Conference on Fairness, Accountability, and Transparency (FAccT'21) INFORMS Annual Conference, virtual The 4th Workshop on Mechanism Design for Social Good (MD4SG'20) INFORMS Annual Conference, Seattle, WA 	Jun 2021 Jun 2021 Apr 2021 Mar 2021 Mar 2021 Nov 2020 Aug 2020 Oct 2019
 A Choice Modelling Framework for Service Time Windows INFORMS Annual Conference, Seattle, WA MSOM Annual Conference, Singapore INFORMS Revenue Management & Pricing Conference, Palo Alto, CA POMS Annual Conference, DC INFORMS Annual Conference, Phoenix, AZ 	Oct 2019 Jul 2019 Jun 2019 May 2019 Nov 2018

- Computer Skills Scientific Computing: R, Python, Matlab.
 - Software and Tools: Gurobi, CPLEX.
 - Others: Latex, HTML, SQL.