

Xiao Lei 雷曉

CONTACT INFORMATION	Flat 817 K.K. Lueng Building University of Hong Kong Hong Kong, China	<i>Phone:</i> +852-9509 7242 <i>Email:</i> xlei@hku.hk <i>Homepage:</i> http://xiao-lei.org
EMPLOYMENT	HKU Business School, University of Hong Kong	Hong Kong
	Assistant Professor in Innovation & Information Management (OM Area)	Sep 2022-
EDUCATION	Columbia University	New York, NY
	Ph.D. in Operations Research	Jul 2022
	M.S. in Operations Research	Feb 2018
	University of International Business and Economics	Beijing, China
	B.S. in Financial Engineering	Jun 2016
RESEARCH INTERESTS	Digital Economy, People-centric Operations, Revenue Management, Responsible Operations	
INDUSTRY EXPERIENCE	Activision (video games, 2020, 2024, 2025), Beifei Technology (K12 Education, 2023), Beststudy Education (K12 Education, 2024-present), Boyaa (online card games, 2024, 2025), FingerTango (video games, 2023-present), Lane Crawford (luxury retailer, 2023), Tencent Marketing Solutions (advertisement, 2023-present).	

WORKING PAPERS “Balanced Game Design”, with Xinyi Guan.

“Dynamic Optimization for In-App Advertising Games: A Data-Driven Methodology Validated with Field Experiments”, with Jiacheng Chang, Zhixi Wan and Lei Huang.

- Conference Version: **AAMAS 2026**.

“Pricing and Addiction Control for Digital Services”, with Jiacheng Chang and Feng Tian.

- Conference Version: **WINE 2025**.
- Second Place, INFORMS Behavioral OM Best Working Paper Award, 2025.
- Finalist for Jiacheng Chang, POMS-HK Best Student Paper Award, 2025.

“Experimental Design in Live-Interaction Platforms”, with Chenran Weng and Nian Si.

“Regulating Discriminatory Pricing in the Presence of Tacit Collusion”, with Zongsen Yang and Pin Gao.

- Conference Version: **WINE 2024**.

- Finalist for Zongsen Yang, POMS College of Service Operations Management (CSOM) Best Student Paper Competition, 2026.
- Finalist for Zongsen Yang, INFORMS Service Science Best Student Paper Award, 2024.

“Content Rotation in the Presence of Satiation Effects”, with Beichen Wan and Shixin Wang.

“Taste of Free Lunch: The Impact of Free Product Disclosure on Review Dynamics”, with Yimin Yin and Yipu Deng.

“Herding, Learning and Incentives for Online Reviews”, with Rajeev Kohli, Yimin Yin and Yeqing Zhou.

PUBLICATIONS

“Matchmaking Strategies for Maximizing Player Engagement in Video Games”, with Mingliu Chen and Adam Elmachtoub. *Management Science*, forthcoming.

- Conference Version: **EC 2022**.
- Third Place, INFORMS Service Science Best Student Paper Award, 2024.
- Honorable Mention, INFORMS George Dantzig Dissertation Award, 2023 (part 3 of 3).

“Price Discrimination with Fairness Constraints”, with Maxime Cohen and Adam Elmachtoub. *Management Science* (2022).

- Conference Version: **FAccT 2021**.
- Invited to present at the Financial Conduct Authority (FCA) of UK.
- Featured article in Management Science 2022 December Issue.
- Spotlight presentation at INFORMS RMP Conference 2021.
- INFORMS RMP Section Prize, 2025.
- Finalist, INFORMS RMP Jeff McGill Student Paper Award, 2022.
- Honorable Mention, INFORMS George Dantzig Dissertation Award, 2023 (part 2 of 3).

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

- Conference Version: **EC 2020**.
- Invited to present at the Federal Trade Commission (FTC) Workshop on Consumer Issues Related to Loot Boxes, 2019 (one of four research papers selected).
- First Place, INFORMS Service Science Best Student Paper Award, 2019.
- Honorable Mention, INFORMS George Dantzig Dissertation Award, 2023 (part 1 of 3).

“Pricing of Reusable Resources under Ambiguous Distributions of Demand and Service Time with Emerging Applications”, joint with Vinh Xuan Doan and Siqian 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

Finalist for Zongsen Yang, POMS College of Service Operations Management (CSOM) Best Student Paper Competition, 2026.

INFORMS Revenue Management & Pricing Section Prize, 2025 (“for the best contribution to the science of pricing and revenue management” in the past five years).

Second Place, INFORMS Behavioral OM Best Working Paper Award, 2025.

Finalist for Jiacheng Chang, POMS-HK Best Student Paper Award, 2025

Finalist for Zongsen Yang, INFORMS Service Science IBM Best Student Paper Award, 2024.

Honorable Mention, INFORMS George B. Dantzig Dissertation Award, 2023

Third Place, INFORMS Service Science IBM Best Student Paper Award, 2022.

Finalist, INFORMS RMP Jeff McGill Student Paper Award, 2022

Third Prize, CSAMSE Best Paper Award, 2021

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

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

STUDENTS

Doctoral Collaborators:

- Mingfei Jiang, PhD at HKU (advisor, co-supervised with Max Shen), 2024-
- Yimin Yin, PhD at HKU (advisor), 2024-
- Mingqing Cai, PhD at HKU (advisor, co-supervised with Zhixi Wan), 2023-
- Jiacheng Chang, PhD at HKU (advisor), 2022-

- Zongsen Yang, PhD at CUHK-Shenzhen (coauthor), 2022-

Pre-doc Mentee:

- Leang Sun (UCL BS → UCL MKT PhD)
- Beichen Wan (Columbia MS → UNC STOR PhD)
- Chenran Weng (USTC BS → Berkeley IEOR PhD)
- Yimin Yin (SJTU BS → HKU OM PhD)

**TEACHING
EXPERIENCE**

University of Hong Kong

Instructor

- MSBA7028 Deep Learning (MSc elective): Spring 2023-2025
- IIMT2641 Introduction to Business Analytics (BSc core): Spring 2023-2025

Columbia University

Instructor

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

**ACADEMIC
SERVICES**

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

Program committee member for *Fairness, Accountability, and Transparency (FAccT)* (2022,2023), *Conference on Web and Internet Economics (WINE)* (2023,2024), *ACM Conference on Economics and Computation (EC)* (2024,2025), *ACM Web Conference (WWW)* (2026), *MSOM Service SIG Conference* (2024).

Competition judge for *POMS-HK Best Student Paper Award* (2023,2024), *INFORMS Service Science Best Student Paper Award* (2023), *CSAMSE Best Paper Competition* (2024, 2025).

Cluster chair for INFORMS 2026 RMP Cluster, session chair for *INFORMS Annual Meeting* (2021,2023-2025), *CSAMSE Conference* (2023), *POMS-HK Conference* (2023-2025).

INVITED TALKS

Invited Seminar Presentations by Institution Names:

- City University of Hong Kong (College of Business), 2026
- University of Toronto Rotman Young Scholar Seminar, 2026
- MIT Data Science Lab Seminar, 2025
- The George Washington University (School of Business), 2025
- University of Miami (Herbert Business School), 2025
- Hong Kong University of Science and Technology (IEDA), 2025
- Nanjing University (School of Engineering Management), 2024

- Shandong University (School of Management), 2024
- Shanghai University of Finance and Economics (Research Institute for Interdisciplinary Sciences), 2023
- Zhejiang University (School of Management), 2023
- Shanghai Jiao Tong University (Antai College of Economics and Management), 2023
- University of British Columbia (Sauder School of Business), 2023
- Tsinghua University (School of Economic and Management), 2023
- Renmin University of China (RUC Business School), 2023
- Chinese University of Hong Kong (CUHK Business School), 2023
- Chinese University of Hong Kong - Shenzhen (School of Data Science), 2023
- The Hong Kong Polytechnic University (Faculty of Business), 2022
- City University of Hong Kong (College of Business), 2022
- Singapore Management University (Lee Kong Chian School of Business), 2022
- Chinese University of Hong Kong (System Engineering and Engineering Management), 2022
- University of Hong Kong (HKU Business School), 2022
- National University of Singapore (NUS Business School), 2022
- New York University (NYU Shanghai & Stern School of Business), 2022
- University of Texas - Dallas (Jindal School of Management), 2022
- University of Michigan - Ann Arbor (Ross School of Business), 2022
- Massachusetts Institute of Technology (Sloan School of Management), 2022
- University of Pennsylvania (Wharton School of Business), 2021
- Hong Kong University of Science and Technology (IEDA & HKUST Business School), 2021

Invited Industry Presentations by Company Names:

- Financial Conduct Authority (FCA) of UK, 2025
- Activision, 2024
- Beststudy Education, 2024
- FunTaste, 2023
- FingerTango, 2023
- Tencent Marketing Solution, 2023
- Riot Games, 2021
- Activision, 2021
- NetEase Games (Thunder Fire UX Research Center), 2021
- ByteDance (Nuverse Games), 2021

Other Conference Presentations by Years:

- 2025: Durham Young-Scholar Workshop, INFORMS
- 2024: MSOM, RMP, INFORMS
- 2023: INFORMS, RMP, MSOM, POMS-HK, CUHK-CUHKSZ joint OM Workshop
- 2022: INFORMS, RMP, EC

- 2021: INFORMS, RMP, MSOM, POM, FAccT, CSAMSE
- 2020: INFORMS, RMP, MSOM, EC, MD4SG, TADC

MEDIA COVERAGE **Content Creator:**

I am a popular science content creator on *Zhihu*, a Chinese knowledge-sharing platform. I have 50K+ followers and my non-academic articles for OM papers have received 1.5M+ reads.

Interviews:

携程遭遇中国反垄断调查 盘点中外“大数据杀熟”整治
BBC News 中文网, Jan 20 2026.

Deliveroo exit could heighten scrutiny of Keeta, Foodpanda
Hong Kong Business, Apr 3 2025.

Will China Ease Its New Video Game Controls? Investors Think So.
The New York Times, Dec 27 2023.

The next big video game Easter Egg is ...O.R.?
Resoundingly Human (INFORMS official podcast), Jun 1 2023.

Contributed Articles:

动态定价如何在解决游戏成瘾问题中实现“双赢”?
Financial Times 中文网, Apr 2 2025.

免费午餐的味道：免费产品披露对评论系统的影响
Financial Times 中文网, Oct 17 2024.

算法孪生：从大数据杀熟到隐性合谋
Financial Times 中文网, Sep 5 2024.