Yilun Chen

School of Data Science · The Chinese University of Hong Kong, Shenzhen
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Academic Appointments

The Chinese University of Hong Kong, Shenzhen 2021–present
Assistant Professor, School of Data Science
On unpaid leave, 2021–2022

Columbia Business School 2021–2022
Postdoctoral Research Scholar, Decision, Risk and Operations Division
Host: Yash Kanoria

Education

Cornell University 2021
Ph.D. in Operations Research
Advisor: David A. Goldberg

Georgia Institute of Technology 2014–2017
Doctoral study in Operations Research; transferred to Cornell University

Peking University 2014
B.S. in Mathematics, Yuanpei College

Research Interests

Algorithm Design for Operations
Online Learning and Sequential Decision-Making
Matching and Market Design

Honors and Research Awards

INFORMS JFIG Best Paper Competition 2024
First place, *"Incentivizing Resource Pooling"*

CSAMSE Best Paper Award 2024
First prize, *"Incentivizing Resource Pooling"*

INFORMS RMP Jeff McGill Student Paper Award 2024
First place (student recipient: Akshit Kumar), *"Feature-Based Dynamic Matching"*

INFORMS George E. Nicholson Student Paper Competition 2019
First place, *"Beating the Curse of Dimensionality in Optimal Stopping"*

INFORMS Section of Finance Student Paper Competition 2018
Finalist, *"Beating the Curse of Dimensionality in Optimal Stopping"*

Tennenbaum Fellowship, Georgia Institute of Technology 2014, 2015

Microsoft Young Fellow, Microsoft Research Asia 2013

Journal Articles

1. **Managing Newsvendors via Demand Shifting**
   Yilun Chen and Jiaqi Lu.
   Operations Research, 2026. Advance online publication.
   Preliminary version: ACM Conference on Economics and Computation (EC), 2024.

2. **Polynomial-Time Algorithm for Optimal Stopping with Fixed Accuracy**
   Yilun Chen and David A. Goldberg.
   Stochastic Systems 16(3): 289–306, 2026.
   First place, 2019 INFORMS George E. Nicholson Student Paper Competition; finalist, 2018 INFORMS Section of Finance Student Paper Competition.

3. **Incentivizing Resource Pooling**
   Chen Chen, Yilun Chen, and Pengyu Qian.
   Management Science 72(8): 6454–6471, 2026.
   Preliminary version: ACM Conference on Economics and Computation (EC), 2024.
   First place, 2024 INFORMS JFIG Best Paper Competition; first prize, 2024 CSAMSE Best Paper Award.

4. **Feature-Based Dynamic Matching**
   Yilun Chen, Yash Kanoria, Akshit Kumar, and Wenxin Zhang.
   Operations Research 74(2): 788–803, 2026.
   Preliminary version: ACM Conference on Economics and Computation (EC), 2023.
   Student coauthor Akshit Kumar received first place in the 2024 RMP Jeff McGill Student Paper Award and third place in the 2025 Michael H. Rothkopf Junior Research Paper Prize for this work.

Working Papers

5. **Beyond Hindsight: A Constant-Loss Framework for Dynamic Resource Allocation**
   Yilun Chen and Wenjia Wang. 2026.

6. **Sharp Characterization of Bias in Post-Bandit Inference**
   Lisu Wang, Yilun Chen, and Jiaqi Lu. 2026.
   Short version accepted at the NeurIPS 2026 Workshop on Machine Learning and Operations Research.

7. **Bandit Allocational Instability**
   Yilun Chen and Jiaqi Lu. 2026.
   Major revision, Management Science.
   Preliminary version: ACM Conference on Economics and Computation (EC), 2026.

8. **A Characterization of Sample Adaptivity in UCB Data**
   Yilun Chen and Jiaqi Lu. 2025.
   Short version accepted at the NeurIPS 2026 Workshop on Machine Learning and Operations Research.

9. **Online Stochastic Packing and Combinatorial Allocation with General Correlations**
   Sabri Cetin, Yilun Chen, and David A. Goldberg. 2025.
   Major revision, Operations Research.

10. **Beyond Non-Degeneracy: Revisiting Certainty Equivalent Heuristic for Online Resource Allocation**
    Yilun Chen and Wenjia Wang. 2025.
    Minor revision, Operations Research.

Teaching

The Chinese University of Hong Kong, Shenzhen

STA2001 · Probability and Statistics I
STA2001H · Honours Probability and Statistics I
STA2002 · Probability and Statistics II
DDA6203 · Selected Topics in Data and Decision Analytics III

Cornell University

ORIE 5582 · Monte Carlo Methods in Financial Engineering — Spring 2021

Doctoral Advising

Lisu Wang · Ph.D. student in Data Science — 2024–present
CUHK-Shenzhen; co-supervised with Tongxin Li

Research Experience

IBM T. J. Watson Research Center, Yorktown Heights, NY — June–August 2020
Ph.D. Research Intern

Invited Seminars

University of Southern California · Marshall School of Business — 2026
The Side Effects of Bandit Algorithms: Allocation Instability and Statistical Bias

University of Toronto · Rotman Young Scholar Seminar — 2026
The Side Effects of Bandit Algorithms: Allocation Instability and Statistical Bias

Tsinghua University · School of Economics and Management — 2025
Recent Developments in Online Resource Allocation: Algorithms and Performance Guarantees

Hong Kong University of Science and Technology · IEDA–ISOM Joint Seminar — 2023
Feature-Based Dynamic Matching

National University of Singapore · IORA Seminar Series — 2021
Tractability of High-Dimensional Online Decision-Making with Limited Action Changes

Cornell University · ORIE Colloquium — 2021
Beating the Curse of Dimensionality in Data-Driven Online Decision-Making

Conference Presentations

INFORMS Annual Meeting — 2018–2021, 2023–2026
INFORMS International Meeting — 2025
INFORMS Manufacturing and Service Operations Management Conference — 2019, 2025
INFORMS Revenue Management and Pricing Conference — 2019, 2026
INFORMS Applied Probability Society Conference — 2019, 2023, 2025
ACM Conference on Economics and Computation — 2023, 2024
POMS Hong Kong Chapter International Conference — 2024–2026
ISCOM, Shanghai — 2023

Workshops and Other Presentations

DDTOR Conference, CUHK-Shenzhen 2025
Greater Bay Area Workshop on Optimization Under Uncertainty, HKU 2024
ITCS Workshop, Shanghai University of Finance and Economics 2024
Kellogg–Wharton Operations Management Workshop 2020
Finger Lakes Probability Seminar 2019
University of Bergamo–Georgia Tech Workshop 2016

Professional Service

Program committees	Conference on Web and Internet Economics (WINE)	2024–2026
	ACM Conference on Economics and Computation (EC)	2026
Conference reviewing	MSOM Conference	2026
	NeurIPS Workshop on Machine Learning and Operations Research	2026
Award judging	INFORMS Nicholson Student Paper Competition	2026
	INFORMS Applied Probability Society Student Paper Competition	2025–2026
	INFORMS Junior Faculty Interest Group Paper Competition	2026
Journal refereeing	Operations Research; Management Science; Manufacturing & Service Operations Management; Mathematics of Operations Research; INFORMS Journal on Computing; Stochastic Systems; Naval Research Logistics; Mathematical Finance; Queueing Systems; Journal of the American Statistical Association; The Annals of Applied Probability.	
Student leadership	Co-president, Operations Research Graduate Student Association, Cornell University	2019–2020