Pengyu Qian

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EDUCATION

Graduate School of Business, Columbia University, New York, NY   2015 - 2021
Ph.D. in Decision, Risk, and Operations
Advisor: Yash Kanoria
Dissertation title: Online decision-making in networked marketplaces

Peking University, China   2011 - 2015
B.Sc. in Mathematics

RESEARCH INTERESTS

My research studies the design and analysis of marketplaces in dynamic settings, using tools from probability, optimization and game theory. I am interested in foundational models driven by challenges in sharing economy and the allocation of public resources. My research emphasizes algorithms/mechanisms that not only have good theoretical guarantees, but also are simple, robust, and hence practical for real-world systems.

ACADEMIC APPOINTMENTS

Mitchell E. Daniels, Jr. School of Business, Purdue University, West Lafayette, IN   2021-
Assistant Professor

SELECTED WORKING PAPERS

6. **Fair Real-Time Scheduling**
   – Draft available soon.

5. **Incentivizing Resource Pooling**
   – Available at SSRN (with Chen Chen and Yilun Chen).

4. **Price Discovery in Waiting Lists**
   – Under review (with Itai Ashlagi, Jacob Leshno, and Amin Saberi).
   – An earlier version appeared in *ACM Conference on Economics an Computation* (*EC '20*).

3. **Large Deviations Optimal Scheduling of Closed Queueing Networks**
   – Major revision at ***Mathematics of Operations Research*** (with Sid Baneerjee and Yash Kanoria).
   – An earlier version appeared in *ACM SIGMETRICS '18*.

PUBLICATIONS

2. **The Competition for Partners in Matching Markets**
   – Minor revision at ***Management Science*** (with Yash Kanoria and Seungki Min).
   – An earlier version appeared in *ACM-SIAM Symposium on Discrete Algorithms* (*SODA '21*).

1. **Blind Dynamic Resource Allocation in Closed Networks via Mirror Backpressure**
   – Forthcoming in ***Management Science*** (with Yash Kanoria).
   – An earlier version appeared in *ACM Conference on Economics an Computation* (*EC '20*).
   – Honorable Mention, *2021 INFORMS Revenue Management and Pricing Student Paper Competition*.

Honors and Awards

Deming Doctoral Research Fellowship	2018
The Paul and Sandra Montrone Doctoral Fellowship	2017
Doctoral Fellowship, Columbia Business School	2015-2021
First Prize 'Mingde' Scholarship (4 year full scholarship)	2011-2015
Ranked 1/300,000 at the National College Entrance Exam in Guangdong Province, China	2011

Teaching Experience

Instructor, *Daniels School of Business, Purdue University*

MGMT 361: Operations Management (Undergraduate Core) – Total enrollment: 157. Rating: 4.4/5.	Spring 2023
MGMT 361: Operations Management (Undergraduate Core) – Total enrollment: 170. Rating: 4.4/5.	Spring 2022

Teaching Assistant, *Graduate School of Business, Columbia University*

B5101: Business Analytics (EMBA Core)	Spring 2019
B6100: Managerial Statistics (MBA Core)	Fall 2016, Spring 2018, Fall 2018

Invited talks & Presentations

Incentivizing Resource Pooling

INFORMS Annual Meeting	2023
Conference of the Chinese Scholars Association for Management Science and Engineering	2023
Marketplace Innovation Workshop	2023

The Competition for Partners in Matching Markets

INFORMS Applied Probability Conference	2023
INFORMS Annual Meeting	2021

Price Discovery in Waiting Lists

The Chinese University of Hong Kong, Shenzhen, School of Management	2022
ACM Conference on Economics and Computation (EC)	2020

Blind Dynamic Resource Allocation in Closed Networks via Mirror Backpressure

Kellogg-Wharton OM Workshop	2020
ACM Conference on Economics and Computation (EC)	2020
INFORMS Annual Meeting	2019
MSOM Annual Conference	2019
ACM Conference on Economics and Computation (EC) Tutorial	2019
Marketplace Innovation Workshop	2019

Dynamic Pricing in Ride-hailing Systems

INFORMS Annual Meeting	2017, 2018
MSOM Annual Conference	2018
Marketplace Innovation Workshop	2018

Professional Service

Reviewer for *Operations Research, Management Science, Manufacturing and Serverice Operations Management, Production and Operations Management, Mathematics of Operations Research, Naval Research Logistics, Stochastic Systems, Transportation Science* journals, and *ACM Conference on Economics and Computation (EC), Conference on Web and Internet Economics (WINE)*.