

Xiaoshan Peng

CONTACT INFORMATION Kelley School of Business, Indiana University
1275 E 10th St, Bloomington, IN 47405
Phone: (812) 855-3486
Email: xpl@iu.edu
Website: www.xiaoshanpeng.com

EDUCATION **Booth School of Business, The University of Chicago**
Ph.D. in Operations Management, 2017
Kellogg School of Management, Northwestern University
M.S. in Operations Management, 2012
Tsinghua University
B. Eng. in Industrial Engineering (with highest honors), 2010

ACADEMIC POSITION **Kelley School of Business, Indiana University**
Assistant Professor, July 2017 -

RESEARCH INTERESTS Service Operations, Queueing Theory, Applied Probability Theory,
Optimal Control Theory, Reinforcement Learning

- JOURNAL PUBLICATIONS**
1. Ata, B., P. Glynn and X. Peng*. 2017. An equilibrium analysis of a discrete-time Markovian queue with endogenous abandonments. *Queueing Systems*, **86**(1), pp. 141-212.
 2. Ata, B. and X. Peng*. 2018. An equilibrium analysis of a multiclass queue with endogenous abandonments in heavy traffic. *Operations Research*, **66**(1), pp. 163-183.
- Honorable mention, George Nicholson Student Paper Competition, 2015
 3. Ata, B. and X. Peng*. 2020. An optimal callback policy for general arrival processes: a pathwise analysis. *Operations Research*, **68**(2), pp. 327-347.
 4. Peng, X., O. Wu, and G.C. Souza. 2024. Renewable, flexible, and storage capacities: Friends or Foes. Accepted. *Manufacturing & Service Operations Management*.

5. Zhao, L., X. Peng, L. Li and Z. Li. 2011. A Fast Signal Timing Algorithm for Individual Oversaturated Intersection. *IEEE Transactions on Intelligent Transportation Systems*, **12**(1) pp. 280-283.

WORKING PAPERS

1. Carlsson, J.G., X. Peng and I.O. Ryzhov*. Demand equilibria in spatial service systems. Major Revision. *Manufacturing & Service Operations Management*.
2. Peng, X. Admission control to a single-class queue with arrival forecast information. Under Review.

*The authorship of this paper is alphabetical.

WORK IN PROGRESS

3. Dynamic scheduling with Bayesian updating of customer characteristics. With B. Li and O. Wu**. *Work in progress (writing stage)*.
4. Optimal data-driven scheduling with equity for underrepresented groups. With I.O. Ryzhov. *Work in progress (analysis and writing stage)*.
5. Optimal scheduling of the drug compounding process. With Chris J. Chen and Kraig Delana. *Work in process (analysis and writing stage)*.
6. Patient flow management with unknown undemand. With K.M. Bretthauer and J.E. Helm. *Work in progress (analysis stage)*.
7. On the equity of physician treatment decisions. With K.M. Bretthauer, J.E. Helm and L. Li**. *Work in progress (primary analysis stage)*.

**Authors underlined are current PhD students.

HONORS AND AWARDS

- Nominee of Indiana University Trustee Teaching Award, 2021
- Honorable mention, George Nicholson Student Paper Competition, 2015
- Doctoral Fellowship, Booth School of Business, University of Chicago

- Graduate Fellowship, Kellogg School of Management, Northwestern University
- Presidential Scholarship, National Scholarship in Tsinghua University, 2006 – 2010

**INVITED
SEMINARS**

- ISE Department, University of Florida, January 2023
- McCombs School of Business, University of Texas at Austin, Austin, TX, October 2020
- Engineering Management, Information, and Systems, Southern Methodist University, Dallas, TX, February 2017
- College of Business Administration, UIC, Chicago, IL, February 2017
- Sauder School of Business, University of British Columbia, Vancouver, BC, February 2017
- Department of Industrial and Enterprise Systems Engineering, UIUC, Urbana, IL, January 2017
- Kelley School of Business, Indiana University, Bloomington IN, January 2017

**CONFERENCE
PRESENTATIONS**

Dynamic scheduling with Bayesian updating of customer characteristics.

- INFORMS MSOM Conference, Montréal, Canada, June 2023
- INFORMS Annual Meeting, Phoenix AZ, October 2023

Renewable, flexible, and storage capacities: Friends or Foes

- INFORMS Annual Meeting, Virtual, November 2020
- 2022 Early-Career Sustainable Operations Workshop, March 2022
- MSOM Sustainable Operations SIG, June 2022
- INFORMS Annual Meeting, Phoenix AZ, October 2023

An Optimal Admission Control Policy for Non-Stationary Arrivals: A Dual Approach.

- INFORMS MSOM Conference, Singapore, June 2019
- 2019 INFORMS 20th Applied Probability Society Conference, Brisbane, Australia, July 2019
- INFORMS Annual Meeting, Seattle, WA, October 2019
- INFORMS Annual Meeting, Virtual, November 2020
- ODT Brownbag Seminar, March 2021
- INFORMS Annual Meeting, Virtual, October 2021

Managing the Callback Option under Arrival Rate Uncertainty

- INFORMS Annual Meeting, Nashville, TN, November 2016
- INFORMS MSOM Conference, Chapel Hill, NC, June 2017
- 2017 INFORMS 19th Applied Probability Society Conference, Evanston, IL, July 2017
- INFORMS Annual Meeting, Houston, TX, October 2017
- INFORMS Annual Meeting, Phoenix, AZ, November 2018

An Equilibrium Analysis of a Multiclass Queue with Endogenous Abandonments

- INFORMS Annual Meeting, San Francisco, CA, November 2014
- MSOM Service SIG, Toronto, Canada, June 2015
- INFORMS Applied Probability Conference, Istanbul, Turkey, July 2015
- INFORMS Annual Meeting, Philadelphia, PA, November 2015
- INFORMS Annual Meeting, Phoenix, AZ, November 2018

TEACHING

Kelley School of Business, Indiana University

Instructor

P429 Operations Processes (2018, 2019, 2020, 2021, 2022, 2023 spring)

K635 Special Topics in Decision Sciences: Queueing Theory (2019 spring)

K603 Probability Models (2020, 2022 spring)

K604 Stochastic Processes (2023 spring)

Booth School of Business, The University of Chicago

Teaching assistant

Executive MBA course, Managerial Decision Modeling

MBA course, Managerial Decision Modeling

MBA course, Managing Service Operations

Ph.D. course, Stochastic Processes

Kellogg School of Management, Northwestern University

Teaching assistant

MBA course, Analytical Decision Modeling

**PROFESSIONAL
SERVICE**

- Track co-chair for M&SOM Service Operations track for the INFORMS Annual Meetings in 2024
- Sessions chairs for INFORMS Annual Meetings (2018, 2019, 2020, 2023)
- Organizing Committee, Manufacturing & Service Operations Management Conference, 2021.
- Reviewers for *Management Science*, *Operations Research*, *Mathematics of Operations Research*, *Manufacturing and Service Operations Management*, *Production and Operations Management*, *Stochastic Systems*, *Mathematical Methods of Operations Research*, *Operations Research Letters*, *European Journal of Operational Research*, *Performance Evaluation*, *Mathematics of Operations Research*
- Reviewers for Manufacturing & Service Operations Management Special Interest Groups (SIG) Conference, 2022
- Judges for MSOM student paper competitions (2020, 2021, 2022)