MENGYING XUE

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Shanghai 200433, China   `https://merylxue.github.io`

EMPLOYMENT

Fudan University, School of Management   2024-present
Associate Professor

University of Science and Technology of China, School of Management   2021-2024
Assistant Professor

Purdue University, Krannert School of Management   2019-2021
Postdoctoral Researcher, Advisor: J.George Shanthikumar, Qi Feng

Tsinghua University, Department of Industrial Engineering   2019-2021
Postdoctoral Researcher, Advisor: Zuo-Jun Max Shen

EDUCATION

Tsinghua University, Department of Industrial Engineering
Ph.D., Operations Research, Advisor: Tianhu Deng, Zuo-Jun Max Shen   2014-2019
B.S., Industrial Engineering   2010-2014

Massachusetts Institute of Technology, MIT Sloan Management School
Visiting Student, Marketing, Advisor: T.Tony Ke   2016-2017

RESEARCH INTERESTS

Topics: Data driven decision making, Consumer choice modeling, Network design, Revenue management, Operations research in energy interfaces

Methodologies: Operational data analytics, Optimization theory, Game theory

PAPERS UNDER REVIEW

1. Hao Shen, **Mengying Xue***, Zuo-Jun Max Shen, "Data-driven reliable facility location design". Accept by ***Management Science***, `https://ssrn.com/abstract=4525872`
   - [**Code**]: `https://github.com/MerylXue/RFLP_code`

2. Qi Feng[α], J. George Shanthikumar[α], **Mengying Xue**[α]*, "Rational choice models: The temporal tree representation". Major revision on ***Management Science***, `https://ssrn.com/abstract=4653687`.

[α] denotes alphabetical order. * denotes corresponding author.

WORK IN PROGRESS

1. "Dynamic Control of Shared Resources in Multitype Service System with an Application in Battery Swap Stations", joint work with Jing Yu, Hao Shen, and Yong Liang.

2. "Warehouse Assortment Planning with Limited Demand Information", joint work with Hao Shen, and Zhenyu Gao.

3. "Contextual data-integrated consumer choice modeling", joint work with Qi Feng and J. George Shanthikumar.

PUBLICATIONS

1. Qi Feng$^\alpha$, J. George Shanthikumar$^\alpha$, **Mengying Xue**$^{\alpha*}$, "Consumer choice models and estimation: A review and extension", ***Production and Operations Management***, 2022, 31(2): 847-867.
   - [**Code**]: https://github.com/MerylXue/choice-models-POMS

2. Jian Chen$^\alpha$, Yong Liang$^\alpha$, Hao Shen$^\alpha$, Zuo-Jun Max Shen$^\alpha$, **Mengying Xue**$^\alpha$, "Offline-channel planning in smart omnichannel retailing", ***Manufacturing and Service Operations Management***, 2022, 24(5): 2444-2462.

3. **Mengying Xue**, Long He, "Spatial pricing and product allocation in online retailing", ***Naval Research Logistics***, 2020, 67(8): 670-684.

4. **Mengying Xue**, Tianhu Deng, Zuo-Jun Max Shen, "Optimizing natural gas pipeline transmission with nonuniform elevation: A new initialization approach", ***Naval Research Logistics***, 2019, 66(7): 547-564.

5. Jingkuan Han, Yingjun Xu, Dingzhi Liu, Yanfang Zhao, Zhongde Zhao, Shuhui Zhou, Tianhu Deng, **Mengying Xue**, Junchi Ye, Zuo-Jun Max Shen, "Operations research enables better planning of natural gas pipelines", ***IINFORMS Journal of Applied Analytics***, 2019, 49(1): 23-29.
   - **2018 INFORMS Franz Edelman Finalist Award**
   - [**Links**]: https://www.informs.org/Impact/O.R.-Analytics-Success-Stories/China-National-Petroleum-Corporation-Operations-Research-Models-Enable-Better-Planning-of-Natural-Gas-Pipelines-Resulting-in-Reduced-Costs-Lower-Budgets-and-Enhanced-Revenues

6. Xiaoyu Ma, Tianhu Deng, **Mengying Xue**, Zuo-Jun Max Shen, Boxiong Lan, "Optimal dynamic pricing of mobile data plans in wireless communications", ***Omega***, 2017, 66(PA): 91-105.

7. **Mengying Xue**, Tianhu Deng, Dingzhi Liu, "CNPC uses an iterative two-stage convex relaxation approach to operate natural gas pipelines", ***Interfaces***, 2016, 46(6):533-546.

FUNDING

HONORS AND AWARDS

INFORMS Franz Edelman Award, Finalist   2018
POMS Emerging Economies Doctoral Students Award   2018

TEACHING EXPERIENCE

University of Science and Technology of China
- Big Data and Business Analytics (for IMBA, in English), Fall 2022 (4.6/5), 2023 (4.5/5)

INVITED TALK

Rational Choice Models: The Temporal Tree Representation
- Workshop, Tsinghua SEM, 2024
- 14th POMS-HK International Conference, HongKong, China, 2024
- School of Management, Xi'an Jiaotong University, 2023

Data-driven reliable facility location design
- CSAMSE Annual Meeting, Shenzhen, China, 2023
- MSOM Annual Meeting, Motreal, Canada, 2023
- 2022 POMS International Conference in China, Online, 2022
- POMS Annual Meeting, Online, 2022
- 12th POMS-HK International Conference, Online, 2022
- CSAMSE Annual Meeting, Online, 2021
- Krannert School of Management, Purdue University, 2020

Consumer choice modeling via operational data analytics
- POMS Annual Meeting, Orlando, US, 2023
- School of Management, Fudan University, 2022
- Krannert School of Management, Purdue University, 2020
- School of Entrepreneurship and Management, ShanghaiTech University, 2020
- School of Management, University of Science and Technology of China, 2020
- 2020 USTC-UW Conference on Fintech and Management Innovation, 2020
- School of Management, Xi'an Jiaotong University, 2020

Offline-channel planning in smart omnichannel retailing
- 13th POMS-HK International Conference, Online, 2023
- 2022 POMS International Conference in China, Online, 2022

Natural gas pipeline transmission with nonuniform network elevation
- POMS Annual Meeting, Houston, TX, US, 2018 (Invited talk for EEDSA award)

Natural gas pipeline transmission optimization for China National Petroleum Corporation
- INFORMS Conference on Business Analytics & Operations Research, Baltimore, Maryland, US, 2018 (Finalist in the Edelman Competition)

REVIEW SERVICE

Management Science, Production and Operations Management, Journal of Management Science and Engineering, ISCOM 2023 Best Paper Competition

PROFESSIONAL SOCIETIES

The Manufacturing and Service Operations Management Society
Production and Operations Management Society

CORPORATE EXPERIENCE

Algorithm Engineer Intern, Kuaishou Technology, Beijing, China	Spet-Dec 2017
Consulting Intern, Shuanghuan Company, Huai'an, Jiangsu, China	Jun-Aug 2016
Consulting Intern, Aviation Industry Corporation of China	Jul-Aug 2015

SKILLS

Programming: Python, Julia, C++,Mathematica, R, SQL
Language: Chinese (Native), English (Professional)

References

Zuo-Jun Max Shen
Vice-President and Pro-Vice-Chancellor (Research)
Chair Professor in Logistics and Supply Chain Management
Professor in HKU Business School
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