

SHILIN YUAN

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ACADEMIC APPOINTMENT

The Chinese University of Hong Kong, Department of Decisions, Operations and Technology

Postdoctoral Fellow (in collaboration with Prof. Xiting Gong)

July. 2025 –Present

EDUCATION

Tsinghua University, Beijing, China

Aug. 2021 –Jun. 2025

Ph.D. in Operations Research **Advisor:** Prof. Jinxing Xie (with close collaboration with Prof. Yuan Zhou)

Huazhong University of Science and Technology, Wuhan, China

Aug. 2017 –Jul. 2021

B.S. in Mathematics and Applied Mathematics

ACADEMIC VISITS

Georgia Institute of Technology, H. Milton Stewart School of Industrial and Systems Engineering

Visiting Student **Host:** Prof. Xin Chen

Jul. 2024 –Nov. 2024

RESEARCH INTERESTS

Methodology: Data-driven Learning and Optimization, Asymptotic Analysis.

Application: Operations Management, especially Inventory Management and Revenue Management.

PUBLICATION

- [1] (Alphabetic) Jiameng Lyu, Jinxing Xie, **Shilin Yuan**, Yuan Zhou. A Minibatch-SGD-Based Learning Meta-Policy for Inventory Systems with Myopic Optimal Policy. Forthcoming at *Management Science*. [\[Link\]](#) [\[SSRN\]](#)
- [2] **Shilin Yuan**, Jiameng Lyu, Jinxing Xie, Yuan Zhou. Asymptotic Optimality of Base-Stock Policies for Lost-Sales Inventory Systems with Stochastic Lead Times. Forthcoming at *Operations Research Letters*. [\[Link\]](#)

WORKING PAPERS

- [1] (Alphabetic) Xin Chen, Jiameng Lyu, **Shilin Yuan**, Yuan Zhou. Learning in Lost-Sales Inventory Systems with Stochastic Lead Times and Random Supplies. Under major revision at *Management Science*. [\[SSRN\]](#)
- [2] (Alphabetic) Junyi Liu, Qihang Sun, Jinxing Xie, **Shilin Yuan**. Joint Dynamic Advertising and Pricing with Demand Learning. Under major revision at *Production Operations Management*.
- [3] (Alphabetic) Jiameng Lyu, **Shilin Yuan**, Bingkun Zhou, Yuan Zhou. Closing the Gaps: Optimality of Sample Average Approximation for Data-Driven Newsvendor Problems. [\[SSRN\]](#) [\[arXiv\]](#)
- [4] (Alphabetic) Xin Chen, Jiameng Lyu, **Shilin Yuan**, Yuan Zhou. Learning When to Restart: Nonstationary Newsvendor from Uncensored to Censored Demand. [\[SSRN\]](#) [\[arXiv\]](#)

WORK IN PROCESS

[1] Asymptotic Optimality of (s, S) Policies for Perishable Inventory Systems with Fixed Ordering Costs.

PROFESSIONAL SERVICES

- **Reviewer:** *Operations Research*
- **Session chair:** 14th POMS-HK International Conference, CSAMSE 2024

HONORS AND AWARDS

- | | |
|--------------------------------------|----------------|
| • National Scholarship (Top 1%) | October 2024 |
| • Excellent Teaching Assistant | July 2024 |
| • Outstanding Graduate | June 2021 |
| • Honored Bachelor's Degree (Top 1%) | June 2021 |
| • Excellent Undergraduate (Top 1%) | September 2018 |

TEACHING EXPERIENCES

Tsinghua University:

- | | |
|---|-------------|
| • Teaching Assistant: Modern Optimization Methods (60420174) | Spring 2024 |
| • Teaching Assistant: Mathematical Programming II (70420624) | Autumn 2023 |
| • Teaching Assistant: Mathematical Models (00420033) | Spring 2023 |
| • Teaching Assistant: Introduction to Mathematical Modelling (00420152) | Autumn 2022 |
| • Teaching Assistant: Mathematical Experiments (10420854) | Spring 2022 |
| • Teaching Assistant: Introduction to Mathematical Modelling (00420152) | Autumn 2021 |

TALKS AND POSTERS

- | | |
|---|------|
| • A Minibatch-SGD-Based Learning Meta-Policy for Inventory Systems with Myopic Optimal Policy. | |
| – 14th POMS-HK International Conference | 2024 |
| – 2024 Purdue Operations Conference | 2024 |
| – 2024 INFORMS Annual Meeting | 2024 |
| • Closing the Gaps: Optimality of Sample Average Approximation for Data-Driven Newsvendor Problems. | |
| – CSAMSE 2024 | 2024 |
| – (Poster) 2024 INFORMS Annual Meeting | 2024 |

MISCELLANEOUS

- **Programming Skill:** MATLAB, Python