

SHILIN YUAN

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EDUCATION

Tsinghua University, Beijing, China Aug.2021 –Jun. 2025 (expected)

Ph.D. Candidate in Operations Research **Advisor:** Prof. Jinxing Xie

Huazhong University of Science and Technology, Wuhan, China Aug.2017 –July 2021

B.S. in Mathematics and Applied Mathematics

RESEARCH INTERESTS

Methodology: Online 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) Jiameng Lyu, **Shilin Yuan**, Bingkun Zhou, Yuan Zhou. Closing the Gaps: Optimality of Sample Average Approximation for Data-Driven Newsvendor Problems. Submitted. [\[SSRN\]](#) [\[arXiv\]](#)

WORK IN PROCESS

- [1] (Alphabetic) Xin Chen, Jiameng Lyu, **Shilin Yuan**, Yuan Zhou. Nonstationary Sample Average Approximation with Applications in Inventory Management.
- [2] **Shilin Yuan**, Jinxing Xie, Xiaobo Zhao, Xiuli Chao. 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

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|--------------------------------------|----------------|
| • National Scholarship. | 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

- 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
- Closing the Gaps: Optimality of Sample Average Approximation for Data-Driven Newsvendor Problems.
 - CSAMSE 2024 2024

MISCELLANEOUS

- **Programming Skill:** MATLAB, Python