SHILIN YUAN

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*. [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*.

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

• Excellent Teaching Assistant.

July 2024

• Outstanding Graduate

June 2021 June 2021

• Honored Bachelor's Degree (Top 1%)

September 2018

• Excellent Undergraduate (Top 1%)

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

 $\bullet \ \ Closing \ the \ Gaps: \ Optimality \ of \ Sample \ Average \ Approximation \ for \ Data-Driven \ Newsvendor \ Problems.$

- CSAMSE 2024 2024

MISCELLANEOUS

• **Programming Skill:** MATLAB, Python