

# YILIN XUE

National University of Singapore, 21 Lower Kent Ridge Road, Singapore, 119077

Email: yilinxue@nus.edu.sg

## EDUCATION

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**National University of Singapore**

*August 2020 – December 2024*

Ph.D. in Industrial Systems Engineering & Management

Dissertation: Risk- and Ambiguity-Averse Optimization Made More Tractable and Less Conservative

**National University of Singapore**

*August 2019 – June 2020*

M.Sc. in Supply Chain Management

**Jinan University**

*September 2015 – June 2019*

B.M. in Logistics Management

## ACADEMIC AND INDUSTRIAL EXPERIENCE

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**National University of Singapore**

*August 2024 – Present*

Postdoctoral Research Fellow

Mentor: Melvyn Sim, Napat Rujeerapaiboon

**National University of Singapore**

*January 2020 - June 2020*

Research Assistant

Mentor: Napat Rujeerapaiboon

**GAC TOYOTA**

*September 2018 - April 2019*

Production Management Intern

Managed Inventory and Participated in Overflow Reduction Project

Staff Member in the 2018 e-Kanban Global Joint Study Session

## RESEARCH INTERESTS

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**Methodologies:** Robust and Distributionally Robust Optimization, Data-Driven Decision Making

**Applications:** Supply Chain Management, Humanitarian Logistics, Disaster Relief Operations

## PUBLICATIONS

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[1] Utility Elicitation and Maximization from Uncertain Certainty Equivalents

*with Napat Rujeerapaiboon and Chunling Luo*

Accepted by **IIE Transactions (2025)**, pp. 1–26

[2] Target-Oriented Regret Minimization for Satisficing Monopolists

*with Napat Rujeerapaiboon and Yize Wei*

Accepted by **Proceedings of The 19th Conference on Web and Internet Economics (WINE 2023, CCF-A ranking, Top-tier Conference)**, pp. 563-581

[3] A Revised Approach for Risk-Averse Multi-Armed Bandits under CVaR Criterion

*with Najakorn Khajonchotpanya and Napat Rujeerapaiboon*

Accepted by **Operations Research Letters (2021)**, Vol. 49, Issue 4, pp. 65-472

## WORKING PAPERS

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- [1] Robust Benchmark Satisficing  
*with Napat Rujeerapaiboon and Melvyn Sim*  
Submitted to **Operations Research**
- [2] Robustness and Regret Tolerance  
*with Napat Rujeerapaiboon*  
Submitted to **Manufacturing & Service Operations Management**
- [3] Data-Driven Disaster Relief Network Design with Guarantees from CVaR and Joint Chance Constraint:  
Cutting Plane Algorithm and LDR Approximation  
*with Yongzhen Li, Napat Rujeerapaiboon, Jia Shu and Weijie Xu*  
Submitted to **INFORMS Journal on Computing**
- [4] Distributionally Robust Inventory Management with Advance Purchase Contracts  
*with Yongzhen Li and Napat Rujeerapaiboon*  
To be submitted to **Mathematical Programming**
- [5] Cost-Sensitive and Envy-Resistant Consensus in Group Decision Making  
*with Jing Tang, Xinwang Liu and Napat Rujeerapaiboon*  
Submitted to **Journal of the Operational Research Society**

## INVITED TALKS

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|---|----------------|
| • INFORMS 2025 Annual Meeting, Atlanta, USA   | October 2025   |
| • The 17th International Conference on Stochastic Programming 2025, Paris, France                                     | July 2025      |
| • The 15th POMS-HK International Conference, Hong Kong, China   | January 2025   |
| • SIAM Conference on Optimization 2023, Seattle, USA  | June 2023      |
| • European Conference on Stochastic Optimization -<br>Computational Management Science Conference 2022, Venice, Italy | July 2022      |
| • The 2022 POMS-China International Conference, Xi'an, China  | June 2022      |
| • The OR Society's 63rd Annual Conference   | September 2021 |

## TEACHING EXPERIENCE

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|---|----------------------|
| • IE6001 Foundations of Optimization (Ph.D.)            | Fall of 2022, 2023   |
| • IE5881 Markovian Analytics (M.Sc.)                    | Spring of 2022       |
| • IE2141 Systems Thinking and Dynamics (B.S.)           | Spring of 2021, 2023 |
| • IE3101 Statistics for Engineering Applications (B.S.) | Fall of 2021         |

## PERSONAL

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**Languages** Teochew (native), Mandarin (native), English (fluent)  
**Hobbies** Boulderling, Traveling

## REFERENCES

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### **Melvyn Sim**

Professor of Department of Analytics & Operations

National Univeristy of Singapore

Email: melvynsim@gmail.com

### **Napat Rujeerapaiboon**

Assistant Professor of Department of Industrial Systems Engineering & Management

National Univeristy of Singapore

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### **Yongzhen Li**

Associate Professor of Department of Management Science and Engineering

Southeast University

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