

Zaile LI

CONTACT INFORMATION	Industrial Systems Engineering & Management, NUS Office: E4-05-48	E-mail: zaile.li@nus.edu.sg Website: sites.google.com/view/zaileli
ACADEMIC POSITIONS	National University of Singapore Department of Industrial Systems Engineering & Management Assistant Professor	2026 – Present
	INSEAD, Healthcare Management Initiative Postdoctoral Researcher	2024 – 2026
EDUCATION	Fudan University Ph.D., Management Science	2021 – 2024
	Fudan University Master's Student, Management Science	2019 – 2021
	University of British Columbia Exchange Student	2018 – 2018
	National Taiwan University Exchange Student	2017 – 2018
	Chongqing University B.A., Information Management & Information Systems	2015 – 2019
RESEARCH INTERESTS	Sequential learning; Bayesian Learning; Stochastic simulation and simulation optimization; Healthcare operations management; improving healthcare innovation pipeline; Generative AI and large language models.	
PAPERS	Healthcare Operations H1. Response Adaptivity Across Clinical Trials in Portfolios of Biomedical Innovations Zaile Li , Stephen E. Chick, and Shane G. Henderson Reject & resubmit at <i>Management Science</i> , 2026 H2. Explore Then Confirm: Investment Portfolios for New Drug Therapies Zaile Li , Stephen E. Chick, Sam Daems, and Shane G. Henderson <i>Winter Simulation Conference</i> , 3214–3225, 2025 H3. Optimizing Portfolios of Multiple Treatments for One Indication Zaile Li , Stephen E. Chick, and Shane G. Henderson Accepted, 2026 <i>Winter Simulation Conference</i> H4. Can Bayesian Decision-Theoretic Clinical Trial Designs, from DeGroot to Chernoff to Today, Have Frequentist Error Control? Stephen E. Chick, Zaile Li , David Roberson, and Sofía Villar Working paper, 2026	

Large Language Model Applications

L1. Screening Virtually: Learning to Select Top Alternatives with (Almost) Free Ranking

Zaile Li, Weiwei Fan, and L. Jeff Hong

Under review, 2026

Sequential Learning, Simulation Optimization

S1. The (Surprising) Sample Optimality of Greedy Procedures for Large-Scale Ranking and Selection

Zaile Li, Weiwei Fan, and L. Jeff Hong

Management Science 71(2):1238–1259, 2025

* **Finalist, 2024 George Nicholson Student Paper Competition**

* **First Prize, 14th POMS-HK Best Student Paper Competition**

S2. New Additive OCBA Procedures for Robust Ranking and Selection

Yuchen Wan, Zaile Li^{*}, and L. Jeff Hong

Asia-Pacific Journal of Operational Research 42(06):2540003, 2025

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S3. Beyond Fixed-Precision and Fixed-Budget Ranking and Selection: Economics of Selection Procedures, New and Old

Stephen E. Chick, Zaile Li, and L. Jeff Hong

Accepted, 2026 *Winter Simulation Conference*

S4. Economics of Selection in Ranking & Selection: Neither Fixed-Precision nor Fixed-Budget

Stephen E. Chick, Zaile Li, and L. Jeff Hong

Working paper, 2026

S5. UCB for Large-Scale Pure Exploration: Beyond Sub-Gaussianity

Zaile Li, Weiwei Fan, and L. Jeff Hong

Reject & resubmit at *Operations Research*, 2025

S6. Sequential Additivity in Distributionally Robust Ranking and Selection

Zaile Li, Yuchen Wan, and L. Jeff Hong

Under review, 2026

S7. Seeking the Best Extreme: An Old-School Perspective and the Self-Comparison Principle

Zaile Li, Yuchen Wan, and L. Jeff Hong

Working paper, 2026

S8. Seeking the Best Extreme under a Fixed Budget

Yuchen Wan, Zaile Li, and L. Jeff Hong

Working paper, 2026

HONORS & AWARDS

Research

- Finalist, Next-Gen Scholar's Symposium 2025, Dept. of ISEM and IORA, NUS 2025
- Outstanding PhD Thesis Award, Fudan University 2025
- Finalist, 2024 George Nicholson Student Paper Competition, INFORMS 2024
- First Prize, Best Student Paper Competition, 14th POMS-HK International Conference 2024
- Outstanding Undergraduate Thesis Award, Chongqing University 2019

Selected Scholarships & Distinctions

- National Scholarship, Ministry of Education of China 2020
- Chongqing Outstanding Graduate 2019
- Tang Lixin Scholarship, Tang Lixin Education Development Fund 2018–2024
- National Scholarship, Ministry of Education of China 2017
- National Scholarship, Ministry of Education of China 2016

TALKS & PRESENTATIONS

Additive Distributionally Robust Ranking and Selection

- INFORMS Annual Meeting (Scheduled) San Francisco, USA, 2026
- Department of Industrial Systems Engineering & Management, NUS Singapore, 2026

Response Adaptiveness Across Clinical Trials in Portfolios of Biomedical Innovations

- MRC Biostatistics Unit, University of Cambridge Cambridge, UK, 2026
- Healthcare Operations Seminar, Cambridge Judge Business School Cambridge, UK, 2026
- Frankfurt School of Finance & Management Frankfurt, Germany, 2026

Explore Then Confirm: Investment Portfolios for New Drug Therapies

- Global Business School for Health, University College London Virtual, 2026
- Winter Simulation Conference Seattle, USA, 2025
- INFORMS Annual Meeting Atlanta, USA, 2025
- Autumn European TOM Seminar Series Virtual, 2025
- INFORMS International Conference Singapore, 2025

Efficient Budget Allocation for Large-Scale LLM-Enabled Virtual Screening

- Next-Gen Scholar's Symposium 2025, NUS Singapore, 2025
- Department of Industrial Systems Engineering & Management, NUS Singapore, 2025
- INFORMS International Conference Singapore, 2025

The (Surprising) Sample Optimality of Greedy Procedures for Large-Scale Ranking and Selection

- INFORMS Annual Meeting Seattle, USA, 2024
- The 14th POMS-HK International Conference Hong Kong, China, 2024
- INFORMS Annual Meeting Phoenix, USA, 2023
- The Fourteenth International Conference of the Chinese Scholars Association for Management Science and Engineering (CSAMSE) Virtual, 2022
- POMS International Conference in China Virtual, 2022

TEACHING EXPERIENCE

Lecturer at National University of Singapore

- Undergraduate, IE3110R Simulation Fall 2026

Teaching Assistant at Fudan University

- Operations Research Fall 2019
- Game Theory Spring 2020
- Operations Management Spring 2020

Applied Stochastic Process	Fall 2021
Statistical Learning	Fall 2023
Marketing Analytics	Spring 2020
Marketing Strategy	Spring 2021
Marketing Management	Spring 2021, 2022, 2023
Operations Management	Spring 2022

SERVICE

Reviewer:

- Management Science
- Operations Research
- Mathematics of Operations Research
- Naval Research Logistics
- Operations Research Letters
- Asia-Pacific Journal of Operational Research

Program Committee Member

- 2025 Winter Simulation Conference – Simulation Optimization Track
- 2026 Winter Simulation Conference – Simulation Optimization Track
- 2026 Winter Simulation Conference – Uncertainty Quantification & Robust Simulation Track
- 2026 Winter Simulation Conference – Analysis Methodology Track

Session Chair

- 2025 Winter Simulation Conference
- The Fourteenth International Conference of the Chinese Scholars Association for Management Science and Engineering (CSAMSE)

Organizer

- Brown Bag Seminars, Department of Management Science, Fudan University

INDUSTRIAL EXPERIENCE

Beijing Xiaoju Technologies Co., Ltd. (DiDi)
Algorithm Engineer Intern

Beijing, CN
2019