

Guang CHENG

Institute of Operations Research and Analytics
National University of Singapore
gcheng@u.nus.edu | <https://gcheng-nus.github.io>

Last Updated in May 2025

EDUCATION

- National University of Singapore, Singapore** *2020 – Present*
Ph.D. Candidate in Operations Research and Analytics
Advisors: Joel Goh, Sıdıka Tunç Candoğan
- University of Science and Technology of China, China** *2016 – 2019*
M.S. in Management Science and Engineering
- Jiangnan University, China** *2012 – 2016*
B.S. in Industrial Engineering

RESEARCH INTERESTS

Topics: Data-Driven Operations in Healthcare; Behavioral Interventions; Mental Health Platforms
Methodologies: Econometric Analysis; Field Experiments; Data Analytics

PUBLISHED WORK

^P Practitioner co-author

- Guang Cheng, Jingui Xie, Zhichao Zheng, ^PHaidong Luo, ^POon-Cheong Ooi. Extubation Decisions with Predictive Information for Mechanically Ventilated Patients in the ICU. *Management Science*. 2024. Article in Advance.
- ^PStephanie Q. Ko, Guang Cheng, ^PTze Yeong Teng, Joel Goh. Home-First or Hospital-First? A Propensity Score-Weighted Retrospective Cohort Study. *Journal of the American Medical Directors Association*, 2024, 25(9):105154.
- Guang Cheng, Sarah Y. Gao, Yancheng Yuan, Chenxiao Zhang, Zhichao Zheng. On the Test Accuracy and Effective Control of the COVID-19 Pandemic: A Case Study in Singapore. *INFORMS Journal on Applied Analytics*, 2022, 52(6):524-538.
- Jingui Xie, Guang Cheng, Zhichao Zheng, ^PHaidong Luo, ^POon-Cheong Ooi. To Extubate or Not to Extubate: Risk Factors for Extubation Failure and Deterioration with Further Mechanical Ventilation. *Journal of Cardiac Surgery*, 2019, 34(10): 1004-1011.

WORKING PAPERS

- Guang Cheng, Sıdıka Tunç Candoğan, Joel Goh, Bilal Gokpinar. The Role of Contextual Information in Customer Reviews: A Field Experiment on a Mental Health Platform. **Major Revision** at *Management Science*.
 - Finalist, 2025 POMS PITM Best Student Paper Competition

- Select for presentation at Workshop on Empirical Operations Management 2025
6. Guang Cheng, ^PJoshua M. Hagood, ^PRyan L. Melvin, ^PAdam F. Kohutnicki, ^PMitchell H. Tsai, Joel Goh. The Impact of Introducing Release Times for Operating Rooms on Surgery Waiting Times.

TEACHING EXPERIENCE

Instructor

- DAO1704 Decision Analytics using Spreadsheets (BBA core) Spring 2023
 - Teaching evaluation: 4.2/5 (department average: 4.0)
 - Teaching Excellence Award for Graduate Instructor

Guest Lecturer

- DBA4811 Analytics for Consulting (BBA) Spring 2025
 - Conducted two lectures on machine learning techniques and their applications.
- PHM5014 Causal Inference in Precision Medicine (MScPHM) Fall 2024
 - Presented the Safe Space experiment to illustrate real-world applications of causal inference, demonstrating how empirical methods inform policy and operational decisions in real business.

Teaching Assistant

- DBA4811 Analytics for Consulting (BBA) Spring 2025
- DBA5103 Operations Research and Analytics (MSBA) Fall 2022
- IE4214 Revenue Management and Pricing Analytics (BEng) Spring 2022

CONFERENCE PRESENTATIONS

The Role of Contextual Information in Customer Reviews: A Field Experiment on a Mental Health Platform

- INFORMS Annual Meeting, Atlanta, Georgia, USA (scheduled) Oct 2025
- MSOM Conference, London, UK (scheduled) June 2025
- POMS Annual Conference, Atlanta, Georgia, USA (scheduled) May 2025
- Workshop on Empirical Operations Management, Hong Kong, China Jan 2025
- The 15th POMS-HK International Conference, Hong Kong, China Jan 2025
- INFORMS Annual Meeting, Seattle, Washington, USA Oct 2024
- The 16th International Annual Conference of CSAMSE, Xiamen, China Jul 2024

The Impact of Introducing Release Policy for Operating Rooms on Surgery Waiting Times

- INFORMS Annual Meeting, Phoenix, Arizona, USA Oct 2023
- POMS Annual Conference, Orlando, Florida, USA May 2023
- The 13th POMS-HK International Conference, Hong Kong, China Jan 2023
- INFORMS Annual Meeting, Indianapolis, Indiana, USA Oct 2022
- POMS Annual Conference, Orlando, Florida, USA (Online) Apr 2022

Extubation Decisions with Predictive Information for Mechanically Ventilated Patients in ICU

- POMS Annual Conference, Orlando, Florida, USA (Online) Apr 2022
- The 13th International Annual Conference of CSAMSE, Shanghai, China (Online) Jul 2021
- The 10th POMS-HK International Conference, Hong Kong, China Jan 2019

PROFESSIONAL EXPERIENCE

- Visiting Scholar, Virginia Tech, Blacksburg, Virginia, USA, Aug 2023 – Dec 2023
- Research Assistant, Singapore Management University, Singapore, Jul 2019 – Jun 2020

SERVICES AND ACTIVITIES

Journal Reviewer

- Humanities and Social Sciences Communications

Conference Reviewer

- MSOM 2025

Conference Session Chair

- | | |
|------------------------------------|-----------|
| • INFORMS Annual Meeting | Oct 2025 |
| • INFORMS International Meeting | Jul 2025 |
| • POMS-HK International Conference | Jan 2025 |
| • POMS Annual Conference | May 2023 |
| • Analytics for X Conference | Sept 2022 |
| • POMS Annual Conference | Apr 2022 |

Organizing Committee

- | | |
|------------------------------|-----------|
| • Analytics for X Conference | Sept 2021 |
|------------------------------|-----------|

HONORS AND AWARDS

- | | |
|---|-----------|
| • Finalist, POMS PITM Best Student Paper Competition | 2025 |
| • Teaching Excellence Award for Graduate Instructor | 2023 |
| • NUS Research Scholarship, National University of Singapore | 2020–2024 |
| • JData Data Mining Competition Top 10, JD.com, inc. | 2017 |
| • National Scholarship, Ministry of Education of People's Republic of China | 2015 |

SKILLS

Programming & Packages: Python, R, MATLAB, SQL, Gurobi

Languages: English (Fluent), Mandarin (Native)