

Guang CHENG

Institute of Operations Research and Analytics

National University of Singapore

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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; Digital Health Platforms

Methodologies: Econometric Analysis; Field Experiments; Data Analytics

PUBLISHED WORK

^P Practitioner co-author

1. Guang Cheng, Jingui Xie, Zhichao Zheng, ^PHaidong Luo, ^POon Cheong Ooi (2025) Extubation Decisions with Predictive Information for Mechanically Ventilated Patients in the ICU. *Management Science* 71(7):6069-6091.
2. ^PStephanie Q. Ko, Guang Cheng, ^PTze Yeong Teng, Joel Goh (2024) Home-First or Hospital-First? A Propensity Score-Weighted Retrospective Cohort Study. *Journal of the American Medical Directors Association* 25(9):105154.
3. Guang Cheng, Sarah Y. Gao, Yancheng Yuan, Chenxiao Zhang, Zhichao Zheng (2022) On the Test Accuracy and Effective Control of the COVID-19 Pandemic: A Case Study in Singapore. *INFORMS Journal on Applied Analytics* 52(6):524-538.
4. Jingui Xie, Guang Cheng, Zhichao Zheng, ^PHaidong Luo, ^POon Cheong Ooi (2019) To Extubate or Not to Extubate: Risk Factors for Extubation Failure and Deterioration with Further Mechanical Ventilation. *Journal of Cardiac Surgery* 34(10): 1004–1011.

WORKING PAPERS

5. 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. Under 2nd round revision at *Management Science*.
 - Finalist, 2025 POMS PITM Best Student Paper Competition

- Selected for presentation at Workshop on Empirical Operations Management 2025
- 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.

WORK-IN-PROGRESS

- Incentive Design for Hospital at Home. (with Joel Goh, Eryn J. He, Sergei Savin)
- Appointment Management in Outpatient Clinics. (with Joel Goh and Hong Ming Tan)
- Retain Clients on Mental Health Platforms Using Nudges. (with Sıdıka Tunç Candoğan and Yueyang Zhong)

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

- DOS3703 Service Operations Management (BBA) Spring 2026
- DBA4811 Analytics for Consulting (BBA) Spring 2025
- PHM5014 Causal Inference in Precision Medicine (MScPHM) Fall 2024

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

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

CONFERENCE PRESENTATIONS

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

- POMS Annual Conference, Reno, Nevada, USA May 2026
- The 16th POMS-HK International Conference, Shenzhen, China Jan 2026
- INFORMS Annual Meeting, Atlanta, Georgia, USA Oct 2025
- INFORMS International Meeting, Singapore Jul 2025

- MSOM Conference, London, UK June 2025
- POMS Annual Conference, Atlanta, Georgia, USA 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, MSOM 2026

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

SKILLS

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

Languages: English (Fluent), Mandarin (Native)