

# Guang CHENG

Institute of Operations Research and Analytics  
National University of Singapore  
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*Last Updated on December 2024*

## EDUCATION

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

## RESEARCH INTERESTS

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**Topics:** Medical Decision-Making; Healthcare Operations; Healthcare Delivery

**Methodologies:** Econometric Analysis; Field experiment; Data Analytics

## PUBLISHED WORK

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1. Guang Cheng, Jingui Xie, Zhichao Zheng, Haidong Luo, Oon-Cheong Ooi. Extubation Decisions with Predictive Information for Mechanically Ventilated Patients in the ICU. *Management Science*.
2. Stephanie Ko, Guang Cheng, Tze 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.
3. Guang Cheng, Sarah Yini 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.
4. Jingui Xie, Guang Cheng, Zhichao Zheng, Haidong Luo, Oon-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

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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. Major Revision at *Management Science*.
6. Guang Cheng, Joshua M. Hagood, Ryan L. Melvin, Adam F. Kohutnicki, Mitchell H. Tsai, Joel Goh. The Impact of Introducing Release Times for Operating Rooms on Surgery Waiting Times.

## CONFERENCE PRESENTATIONS

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

- POMS Annual Conference, Atlanta, Georgia, USA (scheduled) May 2025
- Workshop on Empirical Operations Management, Hong Kong, China (scheduled) Jan 2025
- POMS-HK International Conference, Hong Kong, China (scheduled) 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
- 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
- POMS-HK International Conference, Hong Kong, China Jan 2019

## PROFESSIONAL EXPERIENCE

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

## PROFESSIONAL ACTIVITIES AND SERVICES

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### **Conference Session Chair**

- 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

### **Professional Memberships**

- Institute for Operations Research and Management Sciences (INFORMS)
- INFORMS Health Applications Society (HAS)

## TEACHING EXPERIENCE

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### **Instructor**

- DAO1704 Decision Analytics using Spreadsheets (Undergraduate Core) Spring 2023

### **Guest Lecturer**

- PHM5014 Causal Inference in Precision Medicine (Masters) Fall 2024

### **Teaching Assistant**

- IE4214 Revenue Management and Pricing Analytics (Undergraduate Core) Spring 2022
- DBA5103 Operations Research and Analytics (Masters Core) Fall 2022

## HONORS AND AWARDS

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- NUS Research Scholarship, National University of Singapore, Singapore 2020–2024
- JData Data Mining Competition Top 10, JD.com, inc., China 2017
- National Scholarship, Ministry of Education of People's Republic of China, China 2015

## SKILLS

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

**Languages:** English (Fluent), Mandarin (Native)