

GUANG CHENG

National University of Singapore, Institute of Operations Research and Analytics
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EDUCATION

National University of Singapore, Singapore 2020 – Present

Ph.D. Candidate in Operations Research and Analytics

Thesis 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: Medical decision-making; Healthcare operations; Healthcare design and delivery

Methods: Applied econometrics; Causal inference; Field experiment; Data analytics

PUBLISHED WORK

1. 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.
2. Guang Cheng, Jingui Xie, Zhichao Zheng, Haidong Luo, Oon-Cheong Ooi. Extubation Decisions with Predictive Information for Mechanically Ventilated Patients in ICU. *Management Science*, Forthcoming.
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

1. 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.

WORK-IN-PROGRESS

1. 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

- *The Role of Contextual Information in Customer Reviews: A Field Experiment on a Mental Health Platform*
 - INFORMS Annual Meeting, Seattle, Washington, USA (scheduled) Oct 2024
 - The 16th International 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, virtual Apr 2022
 - IARS Annual Meeting, poster presentation, virtual Mar 2022
- *Extubation Decisions with Predictive Information for Mechanically Ventilated Patients in ICU*
 - POMS Annual Conference, virtual Apr 2022
 - The 13th International Conference of CSAMSE, virtual Jul 2021
 - 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
- Research Assistant, Singapore Management University, Singapore, Aug 2018 – Nov 2018
- Research Assistant, Singapore Management University, Singapore, Sept 2017 – Mar 2018

PROFESSIONAL ACTIVITIES AND SERVICES

Conference Session Chair

- 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

Instructor

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

Teaching Assistant

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

HONORS AND AWARDS

- 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

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