GUANG CHENG

National University of Singapore, Institute of Operations Research and Analytics #04-01, Innovation 4.0, 3 Research Link, Singapore 117602 gcheng@u.nus.edu \diamond https://gcheng-nus.github.io

EDUCATION

National University of Singapore, Singapore Ph.D. Candidate in Operations Research and Analytics Thesis Advisor: Joel Goh University of Science and Technology of China, China M.S. in Management Science and Engineering Jiangnan University, China 2020 – Present 2026 – 2019 2016 – 2019

B.A. in Industrial Engineering

RESEARCH INTERESTS

- Medical Decision Making
- Healthcare Operations Management

WORKING PAPER

1. Guang Cheng, Jingui Xie, Zhichao Zheng, Haidong Luo, Oon-Cheong Ooi. Extubation decision making with predictive information for mechanically ventilated patients in ICU. Major revision at *Management Science*.

Published Papers

- 1. 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*, forthcoming.
- 2. 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.

Conference Presentations

- Extubation decision making 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
- The Impact of Introducing Release Policy for Operating Rooms on Surgery Waiting Times
 - INFORMS Annual Meeting, Indianapolis Oct 2022
 - POMS Annual Conference, virtual Apr 2022

PROFESSIONAL EXPERIENCE

- Research Assistant: Singapore Management University, Jul 2019 Jun 2020
- Research Assistant: Singapore Management University, Aug 2018 Nov 2018
- Research Assistant: Singapore Management University, Sept 2017 Mar 2018

Professional Activities and Service

Conference Session Chair

2022 INFORMS Annual Meeting, Analytics for X Conference, POMS Annual Conference

Organizing Committee

2021 Analytics for X Conference

Professional Memberships

Institute for Operations Research and Management Sciences (INFORMS), Health Applications Society (HAS), Production and Operations Management Society (POMS)

TEACHING EXPERIENCE

Teaching Assistant

• IE4214 Revenue Management and Pricing Analytics (Undergraduate)

Spring 2022

• DBA5103 Operations Research and Analytics (Master)

Fall 2022

Honors and Awards

• NUS Research Scholarship, National University of Singapore, Singapore, 2020-2024

SKILLS

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