GUANG CHENG

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

EDUCATION

National University of Singapore, Singapore   *2020 – Present*
Ph.D. Candidate in Operations Research and Analytics
Thesis Advisor: Joel Goh

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

Data-driven medical decision making; Empirical operations; Healthcare operations; Healthcare design and delivery

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*, 2022, 52(6):524-538.

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*
  - POMS Annual Conference, Orlando, U.S.A. (scheduled)   May 2023
  - POMS-HK International Conference, Hong Kong, China   Jan 2023
  - INFORMS Annual Meeting, Indianapolis, Indiana, U.S.A.   Oct 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 SERVICES

Conference Session Chair

- POMS Annual Conference   May 2023
- INFORMS Annual Meeting   Sept 2022
- 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)
- Production and Operations Management Society (POMS)

TEACHING EXPERIENCE

Instructor

- DAO 1704 Decision Analytics (Undergraduate)   Spring 2023

Teaching Assistant

- IE 4214 Revenue Management and Pricing Analytics (Undergraduate)   Spring 2022
- DBA 5103 Operations Research and Analytics (Masters)   Fall 2022

HONORS AND AWARDS

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

SKILLS

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