

# 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 ◇ <https://gcheng-nus.github.io>

## EDUCATION

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

**University of Science and Technology of China, China** 2016 – 2021  
*Master in Management Science and Engineering*  
Advisors: Jingui Xie, Zhichao Zheng (external)

**Jiangnan University, China** 2012 – 2016  
*Bachelor in Industrial Engineering*

## RESEARCH INTERESTS

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- Medical Decision Making
- Healthcare Operations Management
- Scheduling Systems

## WORKING PAPER

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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

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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

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- Extubation decision making with predictive information for mechanically ventilated patients in ICU
  - *The 13th International Conference of CSAMSE*, virtual July 2021
  - *POMS-HK International Conference*, Hong Kong, China January 2019
  - *POMS Annual Conference*, virtual April 2022
- The Impact of Introducing Release Policy for Operating Rooms on Surgery Waiting Times

- *IARS Annual Meeting*, poster presentation, virtual March 2022
- *POMS Annual Conference*, virtual April 2022
- *INFORMS Annual Meeting* (scheduled) October 2022

## PROFESSIONAL EXPERIENCE

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- *Research Assistant*: Singapore Management University, Jul. 2019 – Jun. 2020
- *Research Assistant*: Singapore Management University, Aug. 2018 – Nov. 2018
- *Research Assistant*: Singapore Management University, Sep. 2017 – Mar. 2018

## PROFESSIONAL SERVICE

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- Session Chair, POMS Annual Conference April 2022
- Organizing Committee Member, Analytics for X Conference 2021 July 2021

## TEACHING EXPERIENCE

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### Teaching Assistant

- IE4214 Revenue Management and Pricing Analytics (Undergraduate) Spring 2022

## HONORS AND AWARDS

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

## SKILLS

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