

YOU HUI GOH

Research Fellow (2025 – Present)
Operations Management, Lee Kong Chian School of Business
Singapore Management University, Singapore
(+65)85229808
yhgoth@smu.edu.sg



My research work focuses on leveraging real-world healthcare data to uncover actionable insights that guide model development and algorithm design. Specifically, I aim to apply data analytics and mathematical modeling to address ethical challenges associated with prioritizing patients amidst scarce healthcare resource allocation. I aspire to drive transformative advancements in building healthcare systems that are not only equitable but also resilient on a global scale.

RESEARCH INTEREST

Healthcare Analytics, Interpretable Artificial Intelligence, Conic Optimization, Optimization under Uncertainty, Piecewise Linear Approximation

WORK EXPERIENCE

Postdoctoral Research Fellow (2024 – 2025)
Information Systems & Operations Management, HEC Paris, France

EDUCATION

Nanyang Technological University (NTU), Singapore
School of Physical and Mathematical Sciences (SPMS)

- PhD in Mathematical Sciences (2019 – 2023)
(Thesis: Balancing waiting times in sequential servers appointment system using distributionally robust optimization)
- BSc (Hons) in Mathematical Sciences with a Minor in Finance (2015 – 2019)

PUBLICATION

Paper 1: Goh, Y. H., Li, Z., & Yan, Z. (2025). *Strategic Idling in Appointment Systems with Sequential Servers*. *Manufacturing & Service Operations Management*, 27(3), 955-974.

WORKING PAPERS

Paper 2: Minimizing the Number of Pieces for Piecewise Linear Approximation in Separable Concave Minimization
with Zhenzhen Yan

Paper 3: Interpretable Machine Learning for Resource Allocation with Application to Ventilator Triage
with Julien Grand-Clément, Carri Chan, Vineet Goyal, Elizabeth Chuang
(*Under Review*)

PRESENTATIONS AT CONFERENCES / MEETINGS

7th International Conference on Continuous Optimization (ICCOPT)
Bethlehem, PA, USA, Jul 23-28, 2022 (Presented Paper 2)

2022 Manufacturing & Service Operations Management (MSOM) Conference
Munich, Germany, Jun 27-28, 2022 (Presented Paper 1)

2021 INFORMS Annual Meeting
Anaheim, CA, USA, Oct 24-27, 2021 (Virtually Presented Paper 1)

AWARDS

NTU Nanyang President's Graduate Scholarship (NPGS), 2019 – 2023

Top Tier PhD Scholarship offered by NTU

NTU Koh Boon Hwee Scholars Award, 2019

Awarded to graduating NTU undergraduates, who display strong leadership ability and have demonstrated great potential to contribute to the society.

NTU College (Undergraduate) Scholarship, 2015 – 2019

Undergraduate Scholarship offered by NTU

TEACHING ASSISTANT

MH1810 Mathematics 1, NTU SPMS, Fall 2022

MH3701 Basic Optimization, NTU SPMS, Spring 2020 to 2022

MH1300 Foundations of Mathematics, NTU SPMS, Fall 2020 and 2021

MH1101 Calculus II, NTU SPMS, Spring 2019

MH1100 Calculus I, NTU SPMS, Fall 2018

- Conduct tutorial classes for the above undergraduate mathematics courses.
- Design Kahoot questions for use at the end of every tutorial as a learning checkpoint.

UNDERGRADUATE SEMESTER EXCHANGE

The University of Hong Kong (HKU), Hong Kong, Fall 2017

INDUSTRY EXPERIENCE

Defence Science Organization (DSO) National Laboratories, Singapore

Undergraduate Research Intern, Summer 2018

- Conduct applied mathematics research in the cybersecurity domain.

Defence Science and Technology Agency (DSTA), Singapore

Undergraduate Data Analyst Intern, Summer 2017

- Build Anomaly Detection capabilities using correlations to do real-time prediction for traffic updates and estimated waiting times of public transport.

LANGUAGE PROFICIENCIES

Programming Languages

MATLAB, Python, C++, C, Java.

Languages

English (Proficient), Mandarin Chinese (Proficient), Japanese (Elementary).

COMMUNITY SERVICE

Anderson Junior College (AJC), Singapore

Alumni Volunteer, 2014 – 2016, 2018 – 2020

- Academic tutoring for GCE A Level students in Mathematics and Physics.

NTU Welfare Services Club (WSC), Singapore

Volunteer, Aug 2016 – Apr 2019

- Academic coaching for underprivileged youths.

NTU Red Cross Youth (RCY), Singapore

Head of Community Involvement Team, Sep 2015 – Sep 2016

- Led an organizing committee for Chinese New Year Event at Singapore's Red Cross Home for the Disabled; and Christmas Event at Singapore's Kang Le Hospice.

OTHER INTERESTS

Academic Guidance, Teaching Pedagogy, Anime, Harmonica, Guitar