Jangwon Park

Updated Sept. 2025

Contact

Email: jangwon.park@mail.utoronto.ca
Webpages: https://parkjan4.github.io/, LinkedIn

Education

University of Toronto Sept. 2021 – Present
Ph.D., Operations Research
Advisors: Timothy Chan, Vahid Sarhangian

École Polytechnique Fédérale de Lausanne Sept. 2018 – Aug. 2020
MSc., Business Analytics
Advisors: Daniel Kuhn, Evangelos Vrettos

University of Toronto Sept. 2013 – Jun. 2018
BASc., Engineering Science

Research Areas

health policy, operations management
stochastic modeling and control, causal inference

Working Papers

Causal impact of inter-hospital patient transfers
Carri W. Chan, Jangwon Park, Vahid Sarhangian, et al.
In preparation for ***Management Science***

Dynamic transfer policies for parallel queues [arXiv]
Timothy C. Y. Chan, Jangwon Park, Vahid Sarhangian
Submitted for Major Revision, ***Operations Research****, 2025*
- ◇ **Runner-up**, 2024 CORS Queueing SIG Student Paper Competition

Optimizing inter-hospital patient transfer decisions: a queueing network approach [SSRN]
Timothy C. Y. Chan, Jangwon Park, Frances Pogacar, Vahid Sarhangian, et al.
Submitted for Major Revision, ***M&SOM****, 2025*
- ◇ **Winner**, 2024 CORS Healthcare SIG Student Paper Competition
- ◇ **Selected for presentation**, 2025 MSOM Healthcare SIG

Robust confidence bands for stochastic processes using simulation [arXiv]
Timothy C. Y. Chan, Jangwon Park, Vahid Sarhangian
Submitted for Minor Revision, ***Operations Research Letters****, 2025*

Published Papers

Evolution of the surgical procedure gap during and after the COVID-19 pandemic in Ontario, Canada: a cross-sectional and modeling study
Rachel Stephenson, Vahid Sarhangian, Jangwon Park, et al.
British Journal of Surgery, Vol. 2023, pp. znad289, 2023.

Trends in Short-Term Renewable and Load Forecasting for Applications in Smart Grid
Deepa Kundar, Dongchan Lee, Jangwon Park
Smart City 360 (2016), pp. 292-300

Teaching Experience

Mechanical and Industrial Engineering, University of Toronto

Instructor, Analytics in Action (MIE368), ***Instructor Rating: 4.5/5*** Fall 2024
Teaching assistant, Stochastic Simulation (MIE1613) Spring 2023, 2024, 2025
Teaching assistant, Analytics in Action (MIE368) Fall 2022, 2023

Management, University of Toronto Scarborough

Teaching assistant, Advanced Business Data Analytics (OD31) Summer 2022

Statistics Without Borders

Volunteer instructor, machine learning [video lesson] Spring 2023

Professional Experience

Research Intern Mar. 2020 – Oct. 2020
Swissgrid Ltd., Aarau, Switzerland
◇ Developed a hybrid optimization algorithm for employee scheduling, solving various instances by an order of magnitude faster than CPLEX, a commercial solver.

Data Analyst May 2016 – Aug. 2017
Celestica International Inc., Toronto, ON, Canada
◇ Automated the monthly financial reporting process using Sisense and SQL, reducing task completion time from 8 to 2 hours per month.

Industry Projects

Automating Order Management Process at Daily Bread Food Bank
Helen Lee, Jangwon Park, Rachel Wong
◇ Reduced staff time from 2 days to 2 hours per week.

A hybrid optimization approach for employee rostering: Use cases at Swissgrid and lessons learned[arXiv print]
Jangwon Park, E. Vrettos

Presentations

"Dynamic Transfer Policies in Parallel Queues"
CORS Annual Conference 2024, London, ON, Canada
INFORMS Annual Meeting 2024, Seattle, WA, USA
MSOM Conference 2025, London, UK
INFORMS APS Conference 2025, Atlanta, GA, USA

"Optimizing inter-hospital patient transfer decisions"
CORS Annual Conference 2024, London, ON, Canada
MSOM Healthcare SIG 2025, London, UK

"Robust confidence bands for stochastic processes using simulation"
Ph.D. Colloquium, Winter Simulation Conference 2024, Orlando, FL, USA

Research Mentorship

Helen Lee (summer project, undergraduate thesis) May. 2024–Present
Arman Zahar (undergraduate research project) Aug. 2025–Present

Selected Awards

Research

1st place, 2024 CORS Healthcare OR SIG Student Paper Competition
2nd place, 2024 CORS Queueing & Applied Prob. SIG Student Paper Competition

Scholarships

NSERC Canada Graduate Scholarship ($115,000)	2023–26
Mart Liinve Graduate Scholarship ($3,800)	2024
Ontario Graduate Scholarship ($15,000)	2022
6T6 Industrial Engineering 50th Anniversary Award ($3,000)	2021, 2022
Queen Elizabeth II Graduate Scholarship ($15,000)	2021
NSERC Undergraduate Student Research Award ($4,500)	2015
University of Toronto Scholars ($5,000)	2013

Service

Ad-hoc journal referee:

Operations Research
Health Care Management Science

Conference session chair:

CORS Annual Conference	2025
INFORMS Annual Meeting	2024
INFORMS Healthcare Conference	2023

References

Timothy C. Y. Chan
Associate Vice-President and Vice-Provost, Strategic Initiatives
Professor, Mechanical and Industrial Engineering
University of Toronto
tcy.chan@utoronto.ca

Vahid Sarhangian
Associate Professor, Mechanical and Industrial Enginering
University of Toronto
sarhangian@mie.utoronto.ca

Philipp Afèche
Professor, Operations Management and Statistics
Rotman School of Management, University of Toronto
philipp.afeche@rotman.utoronto.ca