Jangwon Park

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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., Management of Technology
Advisors: Daniel Kuhn, Evangelos Vrettos

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

Research Areas

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

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.

Teaching Experience

Mechanical and Industrial Engineering, University of Toronto
Instructor, Analytics in Action (MIE368) 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

Industry Project

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

Working Papers

Causal impact of inter-hospital patient transfers
C. W. Chan, J. Park, V. Sarhangian
Work in progress

Dynamic transfer policies for parallel queues [arXiv]
T. C. Y. Chan, J. Park, V. Sarhangian
Submitted for Major Revision, Operations Research, 2025

Optimizing inter-hospital patient transfer decisions: a queueing network approach [SSRN]
T. C. Y. Chan, J. Park, F. Pogacar, V. Sarhangian, E. Hellsten, F. Razak, A. Verma
Submitted for Major Revision, Manufacturing & Service Operations Management, 2025

Robust confidence bands for stochastic processes using simulation [arXiv]
T. C. Y. Chan, J. Park, V. 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
R. Stephenson, V. Sarhangian, J. Park, T. C. Y. Chan, and 13 others
British Journal of Surgery, Vol. 2023, pp. znad289, 2023.

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

Presentations

"Dynamic Transfer Policies in Parallel Queues"
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"
MSOM Healthcare SIG 2025, London, UK

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

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

Mart Liinve Graduate Scholarship ($3,800)	2024
NSERC Canada Graduate Scholarship ($115,000)	2023–26
Ontario Graduate Scholarship ($15,000)	2022–23
6T6 Industrial Engineering 50th Anniversary Award ($3,000)	2021, 2022
Queen Elizabeth II Graduate Scholarship ($15,000)	2021–22

Service

Ad-hoc journal referee:
Health Care Management Science

Conference session chair:

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