# Jangwon Park

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## Contact

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*Webpages*: https://parkjan4.github.io/, LinkedIn

## Education

**University of Toronto** Sept. 2021 – Present
Ph.D., Operations Research

**École Polytechnique Fédérale de Lausanne** 2018 – 2020
MSc., Management of Technology

**University of Toronto** 2013 – 2018
BASc., Engineering Science

## Research Areas

stochastic modeling and control, applied machine learning, operations management, public policy

## Professional Experience

**Research Intern** Mar. 2020 – Oct. 2020
*Swissgrid Ltd.*, Aarau, Switzerland
◇ Developed a hybrid optimization algorithm for employee scheduling which can solve 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 Assistantship

**Mechanical and Industrial Engineering, University of Toronto**
Stochastic Simulation (MIE1613) Spring 2023
Analytics in Action (MIE368) Fall 2022, 2023

**Management, University of Toronto Scarborough**
Advanced Business Data Analytics (OD31) Summer 2022

## Industry Project

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

## Working Papers

**Robust confidence bands for transient simulation outputs**
T. C. Y. Chan, J. Park, V. Sarhangian
*Draft in progress, 2024*

**Dynamic transfer policies for parallel queues** [arXiv print]
T. C. Y. Chan, J. Park, V. Sarhangian
*Under review, 2024*

**Optimizing inter-hospital patient transfer decisions during a pandemic: a queueing network approach** [SSRN print]
T. C. Y. Chan, J. Park, F. Pogacar, V. Sarhangian, E. Hellsten, F. Razak, A. Verma
*Major revision, Manufacturing & Service Operations Managemenet, 2024*

## 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 2022, Indianapolis, IN, USA
INFORMS Healthcare Conference 2023, Toronto, ON, Canada
INFORMS Annual Meeting 2023, Pheonix, AZ, USA
CORS Annual Conference 2024, London, ON, Canada

"Optimizing inter-hospital patient transfer decisions during a pandemic"
CORS Annual Conference 2024, London, ON, Canada

## 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**

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| Mart Liinve Graduate Scholarship ($3,800) | 2024 |
| NSERC Canada Graduate Scholarship ($105,000) | 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 |
| NSERC Undergraduate Student Research Award ($4,500) | 2015 |
| University of Toronto Scholars ($5,000) | 2013 |

## Other Involvement

**Volunteer Instructor (Machine Learning)** [video lesson] Jan. 2023 - Present
*Statistics Without Borders*

**Volunteer Researcher** Sep. 2017 - Sep. 2018
*The Rainmaker Enterprise*, Technology Research and Procurement

**VP Operations** Sep. 2017 - Jun. 2018
*NSight*, student mentorship program, University of Toronto

**Co-founder and President** Sep. 2017 - Jun. 2018
*We4Others*, student organization, University of Toronto

**Co-founder and President** Jun. 2015 - Aug. 2016
*Korean Catholics*, student organization, University of Toronto

**Volunteer** [Blog post] May 2014 - Jul. 2014
*Operation Groundswell*