

Jangwon Park

Updated Aug. 2023

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| Contact | Department of Mechanical and Industrial Engineering University of Toronto, Toronto, ON, Canada <i>Email:</i> jangwon.park@mail.utoronto.ca <i>Webpages:</i> https://parkjan4.github.io/ , LinkedIn | |
| Education | University of Toronto Ph.D., Operations Research Advisors: Timothy C. Y. Chan, Vahid Sarhangian | 2021 – Present |
| | École Polytechnique Fédérale de Lausanne MSc., Management of Technology Advisors: Daniel Kuhn, Evangelos Vrettos | 2018 – 2020 |
| | University of Toronto BASc., Engineering Science Advisor: Chi-Guhn Lee | 2013 – 2018 |
| Research Interests | stochastic modeling and control, applied machine learning, healthcare operations management, public policy | |
| Working Papers | <i>Note: Authors are listed alphabetically</i> Optimal dynamic transfer policies for parallel queues Timothy C. Y. Chan, Jangwon Park , Vahid Sarhangian <i>In preparation, 2023</i> Optimizing inter-hospital patient transfer decisions during a pandemic: a queueing network approach Timothy C. Y. Chan, Jangwon Park , Frances Pogacar, Vahid Sarhangian <i>Under revision</i> | |
| Published Papers | Evolution of the surgical procedure gap during and after the COVID-19 pandemic in Ontario, Canada: a cross-sectional and modeling study Timothy C. Y. Chan, Jangwon Park, Vahid Sarhangian, Rachel Stephenson British Journal of Surgery , <i>Forthcoming</i> 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 | |
| Industry Project | A hybrid optimization approach for employee rostering: Use cases at Swissgrid and lessons learned Jangwon Park , Evangelos Vrettos https://arxiv.org/abs/2111.10845 | |

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| Presentations | “Dynamic Load Balancing in Parallel Queueing Networks” INFORMS Annual Meeting 2022, Indianapolis, IN, USA | |
| | “Dynamic Policies for Inter-Hospital Patient Transfers” INFORMS Healthcare Conference 2023, Toronto, ON, Canada (scheduled) | |
| Selected Awards | Aacademic and Research | |
| | 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 |
| Professional Experience | Research Intern | Mar. 2020 – Oct. 2020 |
| | <i>Swissgrid Ltd.</i> , Aarau, Switzerland | |
| | - Developed a hybrid optimization algorithm for employee scheduling which can solve various instances up to an order of magnitude faster than CPLEX, a commercial solver. | |
| | - Created a functional GUI to support the employee rostering model. | |
| | Data Analyst | May 2016 - Aug. 2017 |
| Research Assistantship | <i>Celestica International Inc.</i> , Toronto, ON, Canada | |
| | - Automated the monthly financial reporting process using Sisense and SQL, reducing task completion time from 8 to 2 hours per month. | |
| | Graduate Research Assistant | Apr. 2019 - Nov. 2019 |
| | <i>École Polytechnique Fédérale de Lausanne</i> | |
| | Collection and processing of longitudinal value-added-tax rates in Europe in MATLAB. | |
| Teaching Assistantship | Undergraduate Research Assistant | May 2015 - Aug. 2015 |
| | <i>University of Toronto</i> | |
| | Creation of reusable scripts for power grid analysis in MATLAB. | |
| | Mechanical and Industrial Engineering, University of Toronto | |
| | Stochastic Simulation (MIE1613) | Spring 2023 |
| | Analytics in Action (MIE368) | Fall 2022 |
| | Management, University of Toronto Scarborough | |
| | Advanced Business Data Analytics (OD31) | Summer 2022 |

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| Service | Session Chair | |
| | <i>INFORMS Healthcare Conference</i> (Stochastic Models for Healthcare) | 2023 |
| Other Involvement | Volunteer | Jan. 2023 - Present |
| | <i>Statistics Without Borders</i> | |
| | Volunteer Researcher | Sep. 2017 - Sep. 2018 |
| | <i>The Rainmaker Enterprise</i> , Technology Research and Procurement | |
| | VP Operations | Sep. 2017 - Jun. 2018 |
| | <i>NSight</i> , student mentorship program, University of Toronto | |
| | Co-founder and President | Sep. 2017 - Jun. 2018 |
| | <i>We4Others</i> , student organization, University of Toronto | |
| | Co-founder and President | Jun. 2015 - Aug. 2016 |
| | <i>Korean Catholics</i> , student organization, University of Toronto | |
| | Volunteer | May 2014 - Jul. 2014 |
| | <i>Operation Groundswell</i> | |
| | Blog post | |