

Sun Ju Lee

ISyE Main 405, 755 Ferst Dr. Atlanta, GA 30308

✉ julee@gatech.edu 🌐 sjulee.github.io

EDUCATION	Georgia Institute of Technology , Atlanta, GA <i>H. Milton Stewart School of Industrial and Systems Engineering</i> Ph.D., Operations Research (Expected 2024) M.S., Operations Research	8/2019 – Present 5/2022
	Dartmouth College , Hanover, NH B.A., Engineering Sciences B.E., Mechanical Engineering	9/2014 – 6/2018
WORKING PAPERS	S. J. Lee , G.-G. P. Garcia, M. H. Platner, and S. L. Boulet (2022). Toward Interpretability: Examining Marginal Predictive Value in the Prediction of Adverse Fetal/Neonatal Outcomes. (Submitted)	
BOOK CHAPTERS	S. J. Lee , H. Pandey, and G.-G. P. Garcia (2022). Designing Interpretable Machine Learning Models Using Mixed Integer Programming. In: Pardalos, P. M., Prokopyev, O. A. (eds.) Encyclopedia of Optimization (In progress)	
SELECTED CONFERENCES	A Tolerance-based Approach to Lexicographic Multi-Objective Markov Decision Processes. – INFORMS Annual Meeting, Indianapolis, IN. October 2022. – SMDM Annual Meeting, Seattle, WA. October 2022.	
HONORS AND AWARDS	Finalist , SMDM Lee B. Lusted Prize in <i>Quantitative Methods & Theoretical Developments</i> 2022 President's Fellow , Georgia Institute of Technology Virtual Annual Meeting & Membership Scholarship , SMDM Thayer Scholar , Dartmouth College	2019 – Present 2021 2014 – 2018
TEACHING EXPERIENCE	Teaching Assistant <i>Georgia Institute of Technology</i> , Atlanta, GA – ISyE 3133 Engineering Optimization (undergraduate) – ISyE 6669 Deterministic Optimization (graduate) – ISyE 6661 Linear Optimization (graduate) – ISyE 4134/8813 Constraint Programming (undergraduate/graduate) <i>Dartmouth College</i> , Hanover, NH – ENGS 76 Machine Engineering – ENGS 2 Integrated Design: Engineering, Architecture, and Building Technology – ENGS 25 Introduction to Thermodynamics Graduate Tutor <i>Georgia Institute of Technology</i> , Atlanta, GA – ISyE 2027 Probability with Applications	8/2019 – 12/2021 6/2016 – 11/2017 1/2020 – 4/2020
EMPLOYMENT	Technical Solutions Engineer <i>Epic Systems Corporation</i> , Verona, WI – Supported various hospital organizations around the United States by providing software expertise and technical troubleshooting in the form of prompt solutions – Provided support during and after the install of Epic software, transitioning from legacy EHR software	8/2018 – 6/2019

- Guided project management discussions of add-on modules of software
- Led quarterly discussions with operational and IT leaders at client hospital organizations to improve patient care by providing suggestions on best practices
- Built and maintained long-term relationships with IT staff at client hospital organizations

Product Management Intern

6/2017 – 8/2017

LuminAID, Chicago, IL

- Compiled internal documentation guide and external documentation sheets for testing of various specifications for all products in current product line
- Implemented quality control procedures through inspection checklists at manufacturing facility
- Revamped returns processing operations to ensure positive customer service experience and minimize loss of revenue on returns
- Prepared weekly reports on manufacturing defect trends and product return rates

Engineering Intern

1/2017 – 3/2017

STEMCO, Hayward, CA

- Developed data analytics system to troubleshoot automatic deploying TrailerTail units (a rear-mounted aerodynamic device for trailers)
- Presented key results and metrics to clients through automatically generated reports
- Initiated coordination of UV and Ozone testing with labs according to ASTM and ISO standards
- Assisted in optimizing design of TrailerTail rear-mounted aerodynamic device for use with drop-down trailer

SKILLS

Programming Languages: Python, Gurobi, CUDA, MATLAB, R, SQL, C, Java

Packages: NumPy, pandas, scikit-learn, TensorFlow

Languages: English, Korean

LEADERSHIP AND SERVICE ACTIVITIES

Graduate Research Mentor

5/2022 – 7/2022

Summer Undergraduate Research in Engineering/Sciences Program, Georgia Tech

Teaching Assistant

5/2020 – 6/2020

Seth Bonder Camp in Computational and Data Science for Engineering, Georgia Tech

Secretary

2017 – 2018

Tau Beta Pi Engineering Honor Society, New Hampshire Beta Chapter

Cartoonist

2017 – 2018

The Dartmouth, Student Newspaper

Sexual Assault Peer Advocate

2015 – 2018

Sexual Assault Peer Alliance, Dartmouth College