

Sun Ju Lee

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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
PUBLICATIONS	[P1] S. J. Lee , G.-G. P. Garcia, M. H. Platner, and S. L. Boulet (2023). Interpretable Machine Learning to Predict Adverse Perinatal Outcomes: Examining Marginal Predictive Value of Risk Factors During Pregnancy. <i>American Journal of Obstetrics & Gynecology MFM</i> , 101096.	
BOOK CHAPTERS	[B1] 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	[C2] Composite Clustered Multi-task Learning for Prediction of Adverse Pregnancy Outcomes. – INFORMS Annual Meeting, Phoenix, AZ (Upcoming) – INFORMS Healthcare Conference, Toronto, ON, Canada	7/23
	[C1] A Tolerance-based Approach to Lexicographic Multi-Objective Markov Decision Processes. – INFORMS Annual Meeting, Indianapolis, IN – SMDM Annual Meeting, Seattle, WA	10/22 10/22
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 8/2018 – 6/2019 <i>Epic Systems Corporation, Verona, WI</i> <ul style="list-style-type: none"> – 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 – 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 <i>LuminAID, Chicago, IL</i> <ul style="list-style-type: none"> – 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 <i>STEMCO, Hayward, CA</i> <ul style="list-style-type: none"> – 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 <i>Summer Undergraduate Research in Engineering/Sciences Program, Georgia Tech</i>
	Teaching Assistant 5/2020 – 6/2020 <i>Seth Bonder Camp in Computational and Data Science for Engineering, Georgia Tech</i>
	Secretary 2017 – 2018 <i>Tau Beta Pi Engineering Honor Society, New Hampshire Beta Chapter</i>
	Cartoonist 2017 – 2018 <i>The Dartmouth, Student Newspaper</i>
	Sexual Assault Peer Advocate 2015 – 2018 <i>Sexual Assault Peer Alliance, Dartmouth College</i>