

Jaehwan Lee

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Education

KAIST , Graduate School of Data Science	Daejeon, Korea Feb 2025 – present
Yonsei University , Department of Applied Statistics	Seoul, Korea Mar 2020 – Feb 2025

Experience

Computational Optimization Methods (COMET) Lab , Graduate Researcher Supervised by Prof. Changhyun Kwon	Daejeon, Korea Feb 2025 – present 1 year 1 month
Computational Optimization Methods (COMET) Lab , Undergraduate Researcher Supervised by Prof. Changhyun Kwon	Daejeon, Korea June 2024 – Aug 2024 3 months
Systems Modeling And Programming Lab @ Yonsei (SYMPLY) , Undergraduate Researcher Supervised by Prof. Soongeol Kwon	Seoul, Korea Aug 2022 – June 2024 1 year 11 months

Publications

Supervised Optimization Framework for Charging and Discharging Controls of Battery Energy Storage
IEEE Transactions on Smart Grid, 2024, 15.6: 5610-5621.
Jaehwan Lee, Soongeol Kwon
doi.org/10.1109/TSG.2024.3416369

Projects

Neural Combinatorial Optimization with Decision Transformer Framework Reinforcement Learning Course Team Project <ul style="list-style-type: none">Tools & technologies: Python, PyTorch, OR-ToolsConducted research and led team to design neural combinatorial optimization approach based on decision transformer.	May 2024 – May 2024
Optimizing Energy Consumption by Integrating Machine Learning and Mathematical Optimization Final Project in ESC 29th <ul style="list-style-type: none">Tools & technologies: Python, Scikit-learn, GurobiStudied predict-then-optimize methodology for optimal energy consumption scheduling.	May 2023 – May 2023
Predicting Current Happiness of Seoulites with Happiness Index Data Final Project in ESC 28th <ul style="list-style-type: none">Tools & technologies: Python, Scikit-learn, GurobiStudied bayesian statistics and bayesian machine learning for quantifying uncertainty.	Oct 2022 – Nov 2022

Skills

Programming: Python, C++
Tools: PennyLane, Qiskit, Gurobi, ORTools

Languages

Korean
Native

English
Intermediate

Interests

Optimization: Data-driven Optimization, Contextual Optimization, Combinatorial Optimization

Quantum: Quantum Machine Learning, Variational Quantum Algorithms, Quantum Optimization

Activities

Expanded Statistics Club (ESC), 29th Yonsei University
Jan 2023 – June 2023

Expanded Statistics Club (ESC), 28th Yonsei University
July 2022 – Dec 2022

Awards

2nd Prize, BIG CONTEST 2023 Big Data Analysis with
Emerging Technology
Dec 2023 – present

4th Prize, BIG CONTEST 2022 Big Data Analysis for Innova-
tion
Dec 2022 – present

Honors

Academic Honors, Spring 2022 Yonsei University
Aug 2022 – present

Academic Excellence, Fall 2021 Yonsei University
Feb 2021 – present