

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
Computational Optimization Methods (COMET) Lab , Undergraduate Researcher Supervised by Prof. Changhyun Kwon	Daejeon, Korea June 2024 – Aug 2024
Systems Modeling And Programming Lab @ Yonsei (SYMPLY) , Undergraduate Researcher Supervised by Prof. Soongeol Kwon	Seoul, Korea July 2022 – June 2024

Publications

Supervised Optimization Framework for Charging and Discharging Controls of Battery Energy Storage
Vol. 15, No. 6, pp. 5610-5621. Nov. 2024.
Jaehwan Lee, Soongeol Kwon
doi.org/10.1109/TSG.2024.3416369 (IEEE Transactions on Smart Grid)

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: R, RStan, RcppStudied bayesian statistics and bayesian machine learning for quantifying uncertainty.	Oct 2022 – Nov 2022

Skills

Programming: Python, C++, R
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