

Jaehwan Lee

 jh.lee@kaist.ac.kr  Daejeon, Korea  jaehwan-2ee  jaehwanlee-878400314  0009-0003-9985-7118

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 Re-

searcher

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)

May 2024 – May 2024

Neural Combinatorial Optimization with Decision Transformer Framework

Reinforcement Learning Course Team Project

- Tools & technologies: Python, PyTorch, OR-Tools
- Conducted research and led team to design neural combinatorial optimization approach based on decision transformer.

Optimizing Energy Consumption by Integrating Machine Learning and Mathematical Optimization

May 2023 – May 2023

Final Project in ESC 29th

- Tools & technologies: Python, Scikit-learn, Gurobi
- Studied predict-then-optimize methodology for optimal energy consumption scheduling.

Predicting Current Happiness of Seoulites with Happiness Index Data

Oct 2022 – Nov 2022

Final Project in ESC 28th

- Tools & technologies: Python, Scikit-learn, Gurobi
- Studied bayesian statistics and bayesian machine learning for quantifying uncertainty.

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 Innovation
Dec 2022 – present

Honors

Academic Honors, Spring 2022

Yonsei University
Aug 2022 – present

Academic Excellence, Fall 2021

Yonsei University
Feb 2021 – present