

# Jaemin Lee

Email : [jmlee8939@hanmail.net](mailto:jmlee8939@hanmail.net) | GitHub : <https://github.com/jmlee8939> | Mobile : 82-10-6576-8939

## PERSONAL PROFILE

Development of faster and efficient dynamic merge clustering methods.  
AI-control system using prediction & optimization approaches.  
Analysis of social changes with Bayesian models.  
Deep learning-based time-series prediction models.

## EDUCATION

**Sungkyunkwan University** Sep. 2020 ~ Aug. 2022  
*Master of Science in Industrial Engineering (GPA: 4.38/4.5)*  
**Sungkyunkwan University** Mar. 2014 ~ Aug. 2020  
*Bachelor of Science in Mechanical Engineering (GPA: 3.71/4.5)*

## WORK EXPERIENCES

**Software Engineer – Samsung Electronics, PKG IT, Innovation Center, Device Solutions.** Aug. 2022 ~ Present  
Tasks: Manufacturing Execution System(Dispatcher) software engineering.  
Development of efficient automated dispatching algorithms with data analysis.  
**Data Analyst (Intern) – Deloitte Consulting Korea, AI&D** Dec. 2021 ~ Jan. 2022  
Tasks: Research, Data preprocessing, Crawling open-source data.  
Establishment of analysis environment for electric vehicle.

## PROJECT EXPERIENCES

**Researcher - LG Energy Solution.** Mar. 2021 ~ Aug. 2021  
Development of AI-based temperature control system for slurry supply tank in the battery coater process.  
Tasks: Data processing, Visualization, Data analysis, Modeling, Coding.  
Development of the data selection method for efficient training with imbalanced dataset.  
Utilizing the meta heuristic optimization method to optimize non-derivative objective functions.  
**Researcher - Hanon Systems.** Jun. 2020 ~ Aug. 2022  
Development of AI-based HVAC control system for electric vehicles.  
Tasks: Data processing, Visualization, Data analysis, Modeling.  
Development of the imitated physical system with neural networks.  
Searching optimal control values with the non-linear optimization method.

## ACTIVITIES

**Project Leader - AI competition to detect collisions using vibration data, DACON** Jun. 2020 ~ Jul. 2020  
Tasks : Data Analysis, Modeling, Coding.  
Development of the CNN (Convolutional Neural Networks) based time-series regression model.  
Top 8% model accuracy.  
**Certificates of completion for “Introduction to Data Science in Python” online courses, University of Michigan, Coursera** Nov. 2019 ~ Mar. 2020  
Applied Machine Learning, Text Mining, Plotting, Charting & Data Representation in Python.

## CERTIFICATIONS & LANGUAGE SKILLS

**ADsP (Advanced Data Analytics Semi-Professional), Korea Data Agency**  
**SQLD (SQL Developer), Korea Data Agency**

## TECHNICAL SKILLS

Python (numpy, pandas, matplotlib, Scikit-learn, pyplot), R (dplyr, tidyr, ggplot2, shiny), Deep-learning framework (pytorch), SQL (Oracle, My sql), C, Tableau.

## JOURNAL PUBLICATIONS

Jaemin Lee, Minseok Han, Jong-Seok Lee, (2022). “Convergence Analysis of Connection Center Evolution and Faster Clustering” Pattern Recognition, 127, 108639.  
**Researcher - Hanon Systems.**  
Jaemin Lee, Juhuhn Kim, hyunho Kim, Jong-Seok Lee, (2022) “A Bayesian approach to predict football matches with changed home advantage in spectator-free matches after the COVID-19 break” *Entropy*, 24.3 (2022): 366.