

Dongjae Kim

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EXPERIENCE

Data Engineering, Pukyong National University

- *Post-Master's Research Student* Mar. 2026 – Present

NEWEYE Corp. Co. Ltd.

- *Internship* Dec. 2025 – Jan. 2026
- *Data Analyst, Development Team* Nov. 2024 – Dec. 2024

The Republic of Korea Army

- *Sergeant* Jan. 2020 – Jul. 2021

EDUCATION

Pukyong National University

M.S. in Data Engineering

Busan, Republic of Korea

Feb. 2024 – Feb. 2026

- Data Driven Decision Making Laboratory (Advisor: Prof. HyungBin Moon)
- Thesis: Consumer Decision-Making Simulation Using Persona-Based Large Language Model Agents

Pukyong National University

B.B.A. in Business Administration & B.E. in Bigdata Convergence

Busan, Republic of Korea

Feb. 2018 – Feb. 2024

- Undergraduate Researcher, Data Driven Decision Making Laboratory (Oct. 2022 – Feb. 2024)
- Business Administration Student Council (Mar. 2018 – Feb. 2019)

PUBLICATIONS AND PRESENTATIONS (*: corresponding author)

Publications

- **Kim, D.**, & Moon, HB.* (2025). **The Impact of MaaS Implementation on Shared Micromobility Demand for First-and-Last-Mile Travel and Carbon Reduction.** *Innovation Studies*, 20(3), 25-48. (KCI, In Korean)
- Kim, G., **Kim, D.**, An, H., Bae, S., & Moon, HB.* (2025). **Unsupervised Learning-Based Electrical Anomaly Detection in Electric Vehicle Batteries: A Comparative Study of Charging Methods and Aging Effects.** *Korea Society of Industrial Information Systems*, 30(4), 15-25. (KCI, In Korean)
- **Kim, D.**, Seok, S., & Moon, HB.* (2023). **Asset Allocation Strategy Based on News Article Sentiment Analysis Using BERT and Black-Litterman Model.** *The Korean Journal of Financial Management*, 40(5), 155-180. (KCI, In Korean)

Conference Presentations (†: undergraduate researcher author)

- **Kim, D.**, Kim, Y.†, Kang, G.†, Shin, J., Kim, D., & Moon, HB. (2025, Nov.). **Profiling the User of Real Estate Tax Tech Market.** Korea Data Analysis Society (KDAS), Chungbuk, Korea.
- Shin, J., Jang, W., Jung, S.†, **Kim, D.**, Kim, D., & Moon, HB. (2025, Nov.). **Chatbot Design for Structuring and Feedback Automation of User Input Data.** Korea Data Analysis Society (KDAS), Chungbuk, Korea.
- Kim, G., **Kim, D.**, & Moon, HB. (2025, Jul.). **The Impact of Firms' Industry 4.0 Technology Adoption Strategies on Performance: A Case Study of Domestic Manufacturing Companies.** Korea Society for Innovation Management & Economics (KOSIME), Jeju, South Korea. [Oral Presentation]
- **Kim, D.**, Kim, G.†, Kang, M.†, Keum, D., Kang, J.†, & Moon, HB. (2024, Nov.). **Semantic Main Path Analysis Method Based on Text-Embedding to Identify Technological Trajectories: A Case Study of Smart Grid Technologies.** Korea Technology Innovation Society (KOTIS), Jeju, South Korea. [Oral Presentation]
- Nam, G.†, Kang, M.†, **Kim, D.**, & Moon, HB. (2024, Nov.). **Demand Forecasting for OTT Service Platforms offering Immersive Performance Content: Analysis of the Potential to Resolve Cultural Accessibility Gaps Utilizing Innovative Technologies.** Korea Society of Innovation (KSIOI), Daejeon, South Korea. [Oral Presentation]
- **Kim, D.**, Kim, G.†, & Moon, HB. (2023, Nov.). **Analyzing Changes in MaaS Adoption Across Travel Behavior-Based Clusters: A Study Using Consensus Clustering and a Multinomial Logit Model.** Korea Society of Innovation (KSIOI), Busan, South Korea. [Oral Presentation]

Working Papers

- **Kim, D.,** Kim, G., Moon, HB. (Under Review). **How will mobility as a service reshape the transportation market?** [Working Title].
- **Kim, D.,** Moon, HB. (Submitted). **A novel semantic-enhanced main path analysis in smart grids.** [Working Title]
- **Kim, D.,** Moon, HB. (Work in Progress). **Reconstructing consumer reasoning via persona-based LLM agents.** [Working Title]

RESEARCH EXPERIENCE

Emerging Tech. & Market forecasting — Mobility / Transportation

- **Development of Technology Opportunity and Demand Forecasting Models Using Intelligent Agents**
National Research Foundation of Korea (2025)
- **A study on consumers' behaviors for Mobility as a Service (MaaS) and socioeconomic benefits**
National Research Foundation of Korea (2023)

Energy Tech. / Policy

- **Research on a process for analyzing digital technology convergence in the domestic and international electricity/power industries with case study**
Korea Electrotechnology Research Institute (2024)
- **Policy advisory service for enhancing the future competitiveness of nuclear energy**
Korea Hydro & Nuclear Power (2024)

Data-Analytics System Development

- **Development of an Automated System for Real-time User Data Analysis in Tax Solutions**
Industry-Academia Project with NEWEYE Corp. Ltd, Pukyong National University (2025)
- **Development of a Personalized Asset Tax Solution Support Service Using AI Agents**
Industry-Academia Project with NEWEYE Corp. Ltd, Pukyong National University (2025)

Industrial Data Analytics

- **Development of post-processing logic for measured material-property data and strategies for data utilization**
Korea Automotive Technology Institute (2024)

HONORS & AWARDS

- **Poster Encouragement Award**, Korea Data Analysis Society
Paper: *Profiling the User of Real Estate Tax Tech Market* Nov. 2025
- **Poster Encouragement Award**, Korea Data Analysis Society
Paper: *Chatbot Design for Structuring and Feedback Automation of User Input Data* Nov. 2025
- **Creative Award**, K-Data Science Conference
Project: *Intelligent Patent Convergence (IPC) Service with LLM Agent and Graph RAG* Sep. 2025
- **Best Paper Award**, Korea Technology Innovation Society
Paper: *Semantic Main Path Analysis Method based on Text-Embedding to Identify Technological Trajectories: A Case Study of Smart Grid Technologies* Nov. 2024
- **Excellence Award**, Digital Smart Busan Academy
Project: *Financial News Service with Generative AI and RAG* Oct. 2024
- **Excellence Award**, Pukyong National University
Project: *Selection and Analysis of Fire-Prone Areas to Enhance Fire Response Capabilities* Nov. 2022

LICENSES & CERTIFICATES

Data Analysis

- **Advanced Data Analytics Semi-Professional (ADsP)** Dec. 2021
Korea Data Agency
- **SQL Developer** Dec. 2021
Korea Data Agency

Finance

- **Certified Investment Manager** Dec. 2019
Korea Financial Investment Association
- **Securities Investment Solicitor** Oct. 2019
Korea Financial Investment Association
- **Funds Investment Solicitor** Sep. 2019
Korea Financial Investment Association

Others

- **Computer Specialist in Spreadsheet & Database Level-1** Feb. 2022
Korea Chamber of Commerce and Industry