

EDUCATION

Hanyang University (HYU)

Master's and PhD Integrated Course

Mar. 2024 – Current

Seoul, South Korea

Korea Institute of Energy Technology (KENTECH)

Master's and PhD Integrated Course

Mar. 2022 – 2024

Naju-si, South Korea

Soongsil University

Bachelor of Electrical Engineering (Summa Cum Laude).

Mar. 2015 – Feb. 2022

Seoul, South Korea

Recent PUBLICATIONS (Last 3 Years)

Journal Publications

- J2. LA. Caceres. Najarro, J. Jeong, **Y. Lee**, S. Yoo, Salman, M., J. Kim, G. Lee, and Y. Noh, "Towards energy independence at KENTECH: A comprehensive microgrid implementation roadmap. *Heliyon*, 2024
- J1. **Y. Lee**, J. Oh, D. Kim, and G. Kim, "SHAP Value-Based Feature Importance Analysis for Short-Term Load Forecasting," *J. Electr. Eng. Technol.* (2023). <https://doi.org/10.1007/s42835-022-01161-9>

Conference Publications

- C5. **Y. Lee**, W. Song, J. Song, and Y. Noh, "Extending EV Battery Lifetime: Digital Phenotyping Approach for Departure Time Prediction," *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.*, vol. 8, no. 4, 2024.
- C4. **Y. Lee**, W. Song, J. Song, and Y. Noh, "Departure Time Prediction Using Smartphone Data for Delayed-Full Charging Algorithm," The 2023 ACM International Joint Conference on Pervasive and Ubiquitous Computing and ACM International Symposium on Wearable Computers (UbiComp/ISWC '23 Adjunct), Cancun, Oct. 2023.
- C3. LA. Caceres. Najarro, **Y. Lee**, KE. Toshnazarov, Y. Jang, H. Kim, and Y. Noh, "WMGPT: Towards 24/7 Online Prime Counseling with ChatGPT," The 2023 ACM International Joint Conference on Pervasive and Ubiquitous Computing and ACM International Symposium on Wearable Computers (UbiComp/ISWC '23 Adjunct), Cancun, Oct. 2023.
- C2. U. Lee, G. Jang, P. S. Park, E. Ma, H. Kim, **Y. Lee**, and Y. Noh, "Data-driven Digital Therapeutics Analytics," 2023 IEEE International Conference on Big Data and Smart Computing (BigComp), Jeju-do, Feb. 2023.
- C1. "Data Processing Pipeline of Short-Term Depression Detection with Large-Scale Dataset," 2023 IEEE International Conference on Big Data and Smart Computing (BigComp), Jeju-do, Feb. 2023.

RESEARCH AND TEACHING EXPERIENCE

Research Experience

Research Assistance at Intelligent Mobile Computing (IMC) Lab, Hanyang University (HYU) Mar. 2024 – Present
Intelligent Mobile Computing Lab (Naju-si, South Korea)

Research Assistance at Intelligent Mobile Computing (IMC) Lab, Korea Institute of Energy Technology (KENTECH) Mar. 2022 – Present
Intelligent Mobile Computing Lab (Naju-si, South Korea)

Research Assistance at Digital Signal Processing Lab, Soongsil University Sep. 2018 – Dec. 2021

Academic Experience

Teaching Assistance at Mobile Data Science, Hanyang University (HYU) Sep. 2024 – Dec. 2024

Teaching Assistance at Sensor Data Science, Korea Institute of Energy Technology (KENTECH) Sep. 2023 – Dec. 2023

ONGOING AND COMPLETED PROJECTS

Ongoing Projects

- AI-based delayed full-charging BMS algorithm to reduce EV battery degradation rate (SRFC-MA2202-03)
- Development and demonstration of community energy management system (CEMS) for demand-based energy efficiency (RS-2023-00236325)
- Development of behavioral intervention digital therapy content and establishment of data collection, analysis, and standardization system (NRF-2021M3A9E4080780)

Completed Projects

- (24 ~ 24) Research on Modeling Techniques for Cyber Electronic Warfare Transmission Signal Simulation Analysis (G30220060YD0002)
- (22 ~ 24) GAMS: Grid + AI + Material + Safety (G032653911)
- (22 ~ 23) Establishment of renewable energy based self-sufficient KENTECH microgrid roadmap
- (22 ~ 23) Development of original technology to optimize data-driven treatment delivery acceptance for mobile digital treatment (NRF-2020R1A4A1018774)

HONORS & AWARDS

Honors

- Presidential Science Scholarship 2020, 3rd year sector. Mar. 2020 – Dec. 2021
- Merit-Based Scholarship Half. Mar. 2020 – June. 2020
- Merit-Based Scholarship Full. Sep. 2015 – Dec.2015, Sep. 2018 – Dec. 2018

Awards

- Participation Award, 1st KPX Renewable Energy Power Generation Forecast Competition Solar Sector. Aug. 2019
- Bronze Prize, 11st Soongsil Capstone Design Competition Sponsored by KIAT. Sep. 2021

REFERENCES

- **Professor Youngtae Noh** (Ph.D. Advisor). Associate professor and director of the Intelligent Mobile Computing Lab, Hanyang University, South Korea.
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- **Professor Uichin Lee** (Co-Ph.D. Advisor). Associate professor, KAIST, South Korea
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