

DongGeon Lee

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([GitHub](#), [LinkedIn](#), [Personal Website](#))

RESEARCH INTERESTS

Natural language processing, Large language models (LLMs), Learning from limited data, Machine learning (multi-modal, multi-domain, multi-task), Recommender system

EDUCATION

M.S. student in Artificial Intelligence

February 2024 - February 2026

Pohang University of Science and Technology (POSTECH)

Pohang, South Korea

- Advisor: Prof. Hwanjo Yu

B.S. in Information and Communication Engineering

March 2018 - February 2024

Inha University

Incheon, South Korea

- Relevant Courseworks: *AI Applications, Signal and Systems, Database Capstone Design Algorithm Capstone Design, Data Structure, Digital Image Processing, Numerical Analysis*
- Received Scholarships: *Research scholarship for undergraduate researchers, Scholarships for campus extracurricular activities*

RESEARCH EXPERIENCES

Visiting Researcher

January 2024 - Present

HyperEZ Inc.

Seongnam-si, South Korea

Research Assistant

November 2022 - November 2023

Data Intelligence Laboratory, Inha University

Incheon, South Korea

- Advisor: Prof. Wonik Choi

Research Assistant

August 2021 - June 2023

Nursing Informatics Laboratory, Inha University

Incheon, South Korea

- Advisor: Prof. Insook Cho

CONFERENCES

- [1] Insook Cho, EunJu Lee, and **DongGeon Lee**. Effects of Language Differences on Inpatient Fall Detection Using Deep Learning. *MedInfo 2023: The 19th World Congress on Medical and Health Informatics*, Sydney, Australia, July 2023. (Poster)
- [2] **DongGeon Lee**, EunJu Lee, and Insook Cho. Bridging the Reporting Gap of Inpatient Falls to Improve Safety Practices Using Deep-Learning-Based Language Models and Multisite Data. *AMIA 2023 Clinical Informatics Conference*, Chicago, United States, May 2023. (Peer Reviewed, Oral Presentation)
- [3] Changhun Koo*, Yoonjoo Jung*, and **DongGeon Lee***. Through deep learning-based video processing, Design and implementation of Smart Port Parking Information System. In *Proceedings of the Annual Conference of KIPS 2021*, Yeosu, South Korea, November 2021. (Oral Presentation, *: Co-First Author)

PROJECTS

Big Data Technology for Aviation Safety Management March 2023 - November 2023
Data Intelligence Laboratory, Inha University *Incheon, South Korea*

- Development of a domain-specific language model for identification of causal factors in aviation safety reports

Contribution to Hugging Face Transformers Library November 2023
Open-source Contribution *Online*

- Improve PyTorch usage examples in Hugging Face Transformers for better readability

FallSafe: Reducing Falls with Clinical Data January 2022 - June 2023
Nursing Informatics Laboratory, Inha University *Incheon, South Korea*

- Development of fall report detection models using BERT-based models
- Development of named entity recognition models for the automatic generation of case reports
- Network analysis for drug prescribing patterns

Intelligent Clinical Guidance System Development August 2021 - December 2021
Nursing Informatics Laboratory, Inha University *Incheon, South Korea*

- Topic-modeling for insightful medical data analysis

Smart Port Traffic Control System April 2021 - November 2021
ICT Mentoring, The Federation of Korean Information Industries *Seoul, South Korea*

- Development of a deep learning-based system for real-time detection of parking conditions
- Development of a real-time parking lane recognition algorithm through image processing

PATENT

- [1] System for providing parking information and control method. *KR-Application No. 10-2021-0178090*, South Korea, December 2021.

CERTIFICATIONS

- [1] **Algorithms 1, 2.** *POSTECH STAR-MOOC*, September 2023 - October 2023.
[2] **Deep Learning Course (Advanced).** *Inha Innovation Sharing University for Future Vehicle Technology*, January 2023.
[3] **Building Transformer-Based Natural Language Processing Applications.** *NVIDIA Deep Learning Institute*, August 2022.
[4] **Fundamentals of Deep Learning.** *NVIDIA Deep Learning Institute*, August 2022.
[5] **Amazon Web Services (AWS) Machine Learning Course.** *Inha Innovation Sharing University for Future Vehicle Technology*, February 2022.
[6] **Understanding Deep Learning.** *Hancom Academy*, February 2022.

TEACHING EXPERIENCES

Teaching Assistant

March 2023 - December 2023

Dept. of Information and Communication Engineering, Inha University

Incheon, South Korea

- ICE2004: Data Structure (Fall 2023)
- ICE4016: Database Capstone Design (Fall 2023)
- ICE1005: Introduction to AI Programming (Spring 2023)
- ICE3020: Algorithm Capstone Design (Spring 2023)

Computer Programming Instructor (Contract)

October 2021 - May 2023

Jamcoding, Co., LTD

Seoul, South Korea

- Data Analysis and Visualization
- Programming and Algorithms - Python & C

TECHNICAL SKILLS

- **Programming Languages:** Python, C++, C, JavaScript, Shell Script
- **Frameworks and Libraries:** PyTorch, Keras, TensorFlow, Hugging Face, OpenCV
- **Systems and Tools:** Git, Linux, MySQL, AWS, Arduino, L^AT_EX

LANGUAGE SKILLS

English

- Obtained an **IH (Intermediate High) OPIc grade**; *proficient communication on diverse subjects*, in August 2023
- Obtained a **805 TOEIC score**; *advanced working proficiency*, in February 2023