DongGeon Lee

M.S. student at POSTECH
Mail: dg.lee@postech.ac.kr
Web: https://donggeon.github.io

RESEARCH INTERESTS

Data-centric natural language processing, Domain adaptation for large language models (LLMs), Evaluation of LLMs, Retrieval-Augmented Generation for LLMs

EDUCATIONS

M.S. student in **Artificial Intelligence** February 2024 - February 2026
POSTECH (Pohang University of Science and Technology) *Pohang, South Korea*

- Advisor: Prof. Hwanjo Yu

B.S. in **Information and Communication Engineering** March 2018 - February 2024
Inha University *Incheon, South Korea*

- Received Awards & Scholarships: *Research Scholarship for Undergraduate Researcher, Top Engineering Student Award*

RESEARCH EXPERIENCES

Graduate Research Assistant January 2024 - Present
Data Intelligence Laboratory, POSTECH *Pohang, South Korea*

- Advisor: Prof. Hwanjo Yu

Visiting Researcher December 2023 - January 2024
HyperEZ Inc. *Seongnam, South Korea*

- Host: Sangseok Youn

Undergraduate Research Assistant November 2022 - November 2023
Data Intelligence Laboratory, Inha University *Incheon, South Korea*

- Advisor: Prof. Wonik Choi

Undergraduate 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. *Proceedings of the 19th World Congress on Medical and Health Informatics*, 2024.

[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*, 2023.

[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*, 2021. (*****: Co-First Author)

Under Review

[1] Hyunchul Park, Insook Cho, Byeong Sun Park, and **DongGeon Lee**. Enhancing Adverse Event Reporting with AI: Using Large Language Models to Detect Inpatient Falls.

Patent

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

Projects

Contribution to `Transformers` & `LightEval` Libraries   November 2023 - February 2024
Hugging Face   *Open-source Contribution*
- Improved `PyTorch` usage examples in Hugging Face `Transformers` for better readability
- Fixed typos in the main document of Hugging Face `LightEval`

Hazard Identification and Management in Aviation   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

Inpatient Fall Detection on Clinical Records   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 case reports generation

Teaching Experiences

Lecturer   March 2024 - May 2024
KIRO (Korea Institute of Robotics and Technology Convergence)   *Pohang, South Korea*
- Basic Python Programming

Teaching Assistant   March 2023 - December 2023
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)

Lecturer   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, Shell Script, JavaScript
- **Frameworks and Libraries**: `PyTorch`, `transformers`, `Keras`, `TensorFlow`, `OpenCV`
- **Systems and Tools**: Git, Linux, MySQL, LaTeX