# DongGeon Lee

M.S. student at POSTECH
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## Research Interests

Data-centric natural language processing, Domain adaptation for large language models (LLMs), Improvement of retrieval-augmented generation (RAG), Evaluation of LLMs & RAG

## Educations

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

- Advisor: Prof. Hwanjo Yu

**B.S.** in **Information and Communication Engineering** — Mar 2018 - Feb 2024
*Inha University* — *Incheon, South Korea*

- Honors : *Research Scholarship for Undergraduate Researcher*, *Top Engineering Student Award*

## Research Experiences

**Graduate Research Assistant** — Feb 2024 - Present
*Data Intelligence Lab, POSTECH* — *Pohang, South Korea*

- Advisor: Prof. Hwanjo Yu

**Undergraduate Research Assistant** — Nov 2022 - Nov 2023
*Data Intelligence Lab, Inha University* — *Incheon, South Korea*

- Advisor: Prof. Wonik Choi

**Undergraduate Research Assistant** — Jul 2021 - Jun 2023
*Nursing Informatics Lab, 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, Dec 2021.

## Projects

**Contribution to `Transformers` & `LightEval` Libraries** Nov 2023 - Feb 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** Mar 2023 - Nov 2023
*Data Intelligence Lab, 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** Jan 2022 - Jun 2023
*Nursing Informatics Lab, 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

**Instructor** Mar 2024 - May 2024
*KIRO (Korea Institute of Robotics and Technology Convergence)* *Pohang, South Korea*

- Basic Python Programming

**Teaching Assistant** Mar 2023 - Dec 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)

**Instructor** Oct 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