DongGeon Lee

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RESEARCH INTERESTS

Data-centric Natural Language Processing, Domain adaptation for Large Language Models, Improvement & Evaluation of Retrieval-augmented Language Models

EDUCATIONS

M.S. student in Artificial Intelligence POSTECH (Pohang University of Science and Technology) Advisor: Prof. Hwanjo Yu B.S. in Information and Communication Engineering Inha University Feb 2024 - Present Pohang, South Korea Mar 2018 - Feb 2024 Incheon, South Korea

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

RESEARCH EXPERIENCES

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, Eun Ju 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