DongGeon Lee

M.S. student at POSTECH
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RESEARCH INTERESTS

Natural Language Processing, Aligning LLMs (Large Language Models) to build trustworthy AI, Domain adaptation of LLMs

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 RESEARCH EXPERIENCES Graduate Research Assistant Data Intelligence Lab, POSTECH Feb 2024 - Present Pohang, South Korea

- Advisor: Prof. Hwanjo Yu
- Research on knowledge conflicts of LLMs between external and internal knowledge.
- Research on continual domain-incremental learning in language models.

Undergraduate Research Assistant

Nov 2022 - Nov 2023

Data Intelligence Lab, Inha University

Incheon. South Korea

- Advisor: Prof. Wonik Choi
- Research on post-training of language models for domain adaptation.
- Research on keyphrase extraction from aviation incident reports via fine-tuning language models.

Undergraduate Research Assistant

Jul 2021 - Jun 2023

Nursing Informatics Lab, Inha University

Incheon, South Korea

- Advisor: Prof. Insook Cho
- Research on fall event detection from EMR (Electronic Medical Record) via fine-tuning language models.

TECHNICAL SKILLS

- Programming Languages: Python, Shell Script, (C++, C, JavaScript)
- Frameworks and Libraries: PyTorch, transformers, (Keras, TensorFlow)
- Systems and Tools: Git, Linux, LATEX, (MySQL)

Conferences (International)

- [1] Insook Cho, Eun-Ju Lee, and **DongGeon Lee**. Effects of Language Differences on Inpatient Fall Detection Using Deep Learning. In *Proceedings of the 19th World Congress on Medical and Health Informatics (MedInfo 2024)*, 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.

Conferences (Domestic)

- [1] **DongGeon Lee***, Ahjeong Park*, Hyeri Lee, Hyeonseo Nam, and Yunho Maeng. Question Types Matter: An Analysis of Question-Answering Performance in Retrieval-Augmented Generation Across Diverse Question Types. In *Proceedings of the 36th Annual Conference on Human & Cognitive Language Technology (HCLT 2024), 2024.*
- [2] TaeYoon Kwack*, Jisoo Kim*, Ki Yong Jung, **DongGeon Lee**, and Heesun Park. Tabular-TX: Theme-Explanation Structure-based Table Summarization via In-Context Learning. In *Proceedings of the 36th Annual Conference on Human & Cognitive Language Technology (HCLT 2024)*, 2024. (Excellent Paper Award)
- [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 Korea Information Processing Society 2021 (ACK 2021)*, 2021.

Under Review

- [1] Enhancing Adverse Event Reporting with AI: Using Large Language Models to Detect Inpatient Falls
- [2] Decomposing Non-Factoid Question with Retrieval-Augmented Generation

Honors

Gold Prize (Director's Award of the NIKL) Oct 2024 NIKL (National Institute of Korean Language) • Won the Korean AI Language Proficiency Challenge held by the NIKL. Excellent Paper Award (Director's Award of the NIKL) Oct 2024 The 36th Annual Conference on Human & Cognitive Language Technology (HCLT 2024) Scholarship for Outstanding Graduate Students May 2024 POSTECH Top Engineering Student Award Feb 2024 Inha University Research Scholarship for Undergraduate Researchers Aug 2023 Inha University