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, Aligning LLMs/VLMs to build trustworthy AI, RAG & domain adaptation of LLMs for domain-specific question answering

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 Feb 2024 - Present Pohang, South Korea Mar 2018 - Feb 2024 Incheon, South Korea

Graduate Research Assistant

Feb 2024 - Present Pohang, South Korea

- Data Intelligence Lab, POSTECH
 - Research on building a robust RAG (Retrieval-Augmented Generation).
 - Research on domain-incremental learning in LLMs (Large Language Models).
 - Advisor: Prof. Hwanjo Yu

Undergraduate Research Assistant

Nov 2022 - Nov 2023

Data Intelligence Lab, Inha University

Incheon, South Korea

- Research on domain adaptation of language models in the field of aviation.
- Advisor: Prof. Wonik Choi

Undergraduate Research Assistant

Jul 2021 - Jun 2023

Nursing Informatics Lab, Inha University

Incheon, South Korea

- Research on domain adaptation of language models in the medical field.
- Advisor: Prof. Insook Cho

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