DongGeon Lee

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

Research Interests

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

EDUCATIONS

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

Graduate Research Assistant

Data Intelligence Lab, POSTECH

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

Research Intern Jan 2025 - Feb 2025 Seoul, South Korea KT Corporation

• Research on mathematical data synthesis for pre-training LLMs

Undergraduate Research Assistant

Data Intelligence Lab, Inha University

• 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 LMs.

Undergraduate Research Assistant

Jul 2021 - Jun 2023 Incheon. South Korea

Nov 2022 - Nov 2023

Incheon, South Korea

Feb 2024 - Present

Pohang, South Korea

Nursing Informatics Lab, Inha University

• Advisor: Prof. Insook Cho

• Research on detecting fall events in clinical notes by fine-tuning LMs.

TECHNICAL SKILLS

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

Publications (International)

- [1] **DongGeon Lee***, Ahjeong Park*, Hyeri Lee, Hyeonseo Nam, Yunho Maeng. Typed-RAG: Type-aware Multi-Aspect Decomposition for Non-Factoid Question Answering *NAACL Student Research Workshop 2025*, 2025. (Accepted)
- [2] Insook Cho, Hyunchul Park, Byeong Sun Park, **DongGeon Lee**. Enhancing Adverse Event Reporting With Clinical Language Models: Inpatient Falls. *Journal of Advanced Nursing*, 2025.
- [3] Insook Cho, Eun Ju Lee, **Dong Geon Lee**. Effects of Language Differences on Inpatient Fall Detection Using Deep Learning. In the *Proceedings of the 19th World Congress on Medical and Health Informatics (MedInfo 2023)*, 2024.
- [4] **DongGeon Lee**, EunJu Lee, 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.

Publications (Domestic)

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

Publications (Preprint)

[1] **DongGeon Lee**, Hwanjo Yu. REFIND: Retrieval-Augmented Factuality Hallucination Detection in Large Language Models. arXiv preprint arXiv:2502.13622, 2025.

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