Email: dg.lee@postech.ac.kr Homepage: https://donggeon.github.io Google Scholar: /DongGeon Lee

RESEARCH

Data-centric natural language processing (NLP).

**INTERESTS** 

Building trustworthy and safe Large Language Models (LLMs) — safety & security oversight of language models, including safety evaluations, red teaming, guardrails.

**EDUCATION** 

M.S. student in Artificial Intelligence Feb 2024 - Present

Pohang University of Science and Technology (POSTECH)

Pohang, South Korea

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

RESEARCH EXPERIENCES **Graduate Research Assistant** 

Data Intelligence Lab, POSTECH (Advisor: Prof. Hwanjo Yu)

Feb 2024 - Present Pohang, South Korea

- Research on Vision-Language Model safety benchmarks and evaluation methodologies.
- Research on data-centric approaches to improving the mathematical reasoning skills of low-resource LLMs.

Research Scientist (Freelance)

AIM Intelligence

Jul 2025 - Present Seoul, South Korea

• Research on safety guardrails and robustness evaluations for multi-modal LLMs.

**Research Intern** *KT Corporation* 

Jan 2025 - Feb 2025 Seoul, South Korea

• Research on mathematical data synthesis for pre-training Korea-centric LLM.

**Undergraduate Research Assistant** 

Data Intelligence Lab, Inha University (Advisor: Prof. Wonik Choi)

Nov 2022 - Nov 2023

- Incheon, South Korea
- Research on post-training of Language Models (LMs) 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

Nursing Informatics Lab, Inha University (Advisor: Prof. Insook Cho)

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

## **Publications** International Publications

[14] Are Vision-Language Models Safe in the Wild? A Meme-Based Benchmark Study

<u>DongGeon Lee</u>\*, Joonwon Jang\*, Jihae Jeong, Hwanjo Yu

<u>EMNLP'25</u> | The 2025 Conference on Empirical Methods in Natural Language Processing

[13] Everyday Physics in Korean Contexts: A Culturally Grounded Physical Reasoning Benchmark Jihae Jeong\*, DaeYeop Lee\*, DongGeon Lee, Hwanjo Yu

MRL @ EMNLP'25 | 5th Multilingual Representation Learning Workshop (Co-located with the 2025 Conference on Empirical Methods in Natural Language Processing)

[12] When Good Sounds Go Adversarial: Jailbreaking Audio-Language Models with Benign Inputs

Bodam Kim\*, Hiskias Dingeto\*, Taeyoun Kwon\*, Dasol Choi, <u>DongGeon Lee</u>, Haon Park, Jae-Hoon Lee, Jongho Shin

arXiv Preprint, 2025.08

[11] Typed-RAG: Type-Aware Decomposition of Non-Factoid Questions for Retrieval-Augmented Generation

DongGeon Lee\*, Ahjeong Park\*, Hyeri Lee, Hyeonseo Nam, Yunho Maeng

XLLM @ ACL'25 | The First Workshop on Structure-aware Large Language Models (Colocated with the 63rd Annual Meeting of the Association for Computational Linguistics)

NAACL'25 SRW (Non-Archival) | 2025 Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics: Student Research Workshop

[10] REFIND at SemEval-2025 Task 3: Retrieval-Augmented Factuality Hallucination Detection in Large Language Models

DongGeon Lee, Hwanjo Yu

SemEval @ ACL'25 | The 19th International Workshop on Semantic Evaluation (Co-located with the 63rd Annual Meeting of the Association for Computational Linguistics)

- [9] Theme-Explanation Structure for Table Summarization using Large Language Models: A Case Study on Korean Tabular Data
  - TaeYoon Kwack\*, Jisoo Kim\*, Ki Yong Jung, DongGeon Lee, Heesun Park
  - TRL @ ACL'25 | The 4th Table Representation Learning Workshop (Co-located with the 63rd Annual Meeting of the Association for Computational Linguistics)
- [8] Enhancing Adverse Event Reporting With Clinical Language Models: Inpatient Falls Insook Cho, Hyunchul Park, Byeong Sun Park, <u>DongGeon Lee</u> Journal of Advanced Nursing (SCIE; Q1), 2025.02
- [7] Effects of Language Differences on Inpatient Fall Detection Using Deep Learning Insook Cho, EunJu Lee, <u>DongGeon Lee</u> <u>MedInfo'23</u> | The 19th World Congress on Medical and Health Informatics
- [6] Bridging the Reporting Gap of Inpatient Falls to Improve Safety Practices Using Deep-Learning-Based Language Models and Multisite Data
  DongGeon Lee, EunJu Lee, Insook Cho

AMIA CIC'23 | AMIA 2023 Clinical Informatics Conference

## **Domestic Publications** (written in *Korean*)

- [5] Synthesizing a Korean-centric Math Corpus to Enhance Math Problem-Solving Ability in Korean Large Language Models (Excellent Paper Award)
  DongGeon Lee, Jisoo Baik, Wonjae Park, Hwanjo Yu
  HCLT'25 | The 37th Annual Conference on Human & Cognitive Language Technology
- [4] Designing Synthetic Data and Training Strategies for Multi-hop Retrieval-Augmented Generation Kyumin Lee, Minjin Jeon, Sanghwan Jang, DongGeon Lee, Hwanjo Yu
  - Kyumin Lee, Minjin Jeon, Sanghwan Jang, <u>DongGeon Lee</u>, Hwanjo Yu KCC'25 | Korea Computer Congress 2025
- [3] Question Types Matter: An Analysis of Question-Answering Performance in Retrieval-Augmented Generation Across Diverse Question Types
  <u>DongGeon Lee\*</u>, Ahjeong Park\*, Hyeri Lee, Hyeonseo Nam, Yunho Maeng
  <u>HCLT'24</u> | The 36th Annual Conference on Human & Cognitive Language Technology
- [2] Tabular-TX: Theme-Explanation Structure-based Table Summarization via In-Context Learning (Excellent Paper Award)

  Table on Kronell\* Vices Vine\* Vices Dang Coop Lea Hassun Barle

TaeYoon Kwack\*, Jisoo Kim\*, Ki Yong Jung, <a href="DongGeon Lee">DongGeon Lee</a>, Heesun Park HCLT'24 | The 36th Annual Conference on Human & Cognitive Language Technology

Parking Information System Changhun Koo\*, Yoonjoo Jung\*, DongGeon Lee\* ACK'21 | Annual Conference of Korea Information Processing Society 2021 ACADEMIC Reviewer of AAAI'25 (The Association for the Advancement of Artificial Intelligence) 2025 Reviewer of International Journal of Nursing Studies SERVICES 2025 Reviewer of MELT (Workshop on Multilingual and Equitable Language Technologies) at COLM'25 2025 Reviewer of SemEval (International Workshop on Semantic Evaluation) at ACL'25 2025 Student Volunteer of ACL'25 (Annual Meeting of the Association for Computational Linguistics) 2025 **Excellent Paper Award** 2025 Honors and HCLT 2025 (The 37th Annual Conference on Human & Cognitive Language Technology) **Awards** NAACL 2025 Registration Grant 2025 NAACL 2025 SRW (Student Research Workshop) Gold Prize (Director's Award of the NIKL) 2024 Korean AI Language Proficiency Challenge, NIKL (National Institute of Korean Language) **Excellent Paper Award** 2024  $HCLT\ 2024\ (The\ 36th\ Annual\ Conference\ on\ Human\ \&\ Cognitive\ Language\ Technology)$ Scholarship for Outstanding Graduate Students 2024 **POSTECH** Top Engineering Student Award 2024 Inha University Research Scholarship for Undergraduate Researchers 2023 Inha University **TECHNICAL** Professional working proficiency Python, PyTorch, transformers, vLLM, Git SKILLS Limited working proficiency Shell Script, Keras, LATEX Elementary proficiency DeepSpeed, TensorFlow, C++, C, MySQL

[1] Through deep learning-based video processing, Design and implementation of Smart Port