

DongGeon Lee

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([GitHub](#), [LinkedIn](#), [Personal Website](#))

RESEARCH INTERESTS

Natural language processing, Large language model (LLM), LLM Quantization,
Learning from limited data, Domain-specific knowledge distillation

EDUCATION

B.S. in Information and Communication Engineering <i>Inha University</i>	March 2018 - Present <i>Incheon, South Korea</i>
<ul style="list-style-type: none">• Expected Graduation Date: February 16, 2024• Relevant Coursework: <i>AI Applications, Signal and Systems, Database Capstone Design Algorithm Capstone Design, Data Structure, Digital Image Processing, Numerical Analysis</i>	

RESEARCH EXPERIENCES

Research Intern (Advisor: Prof. Wonik Choi) <i>Data Intelligence Laboratory, Inha University</i>	November 2022 - Present <i>Incheon, South Korea</i>
Research Assistant (Advisor: Prof. Insook Cho) <i>Nursing Informatics Laboratory, Inha University</i>	August 2021 - June 2023 <i>Incheon, South Korea</i>

PROJECTS

Big Data-Driven Aviation Safety Management Technology <i>Data Intelligence Laboratory, Inha University</i>	March 2023 - Present <i>Incheon, South Korea</i>
<ul style="list-style-type: none">• (Ongoing) Development of accident cause extraction model using Sentence-BERT	
Contribution to Hugging Face Transformers Library <i>Open-source Contribution</i>	November 2023 <i>Online</i>
<ul style="list-style-type: none">• Improve PyTorch examples of uses of Hugging Face Transformers for better readability	
FallSafe: Reducing Falls with Clinical Data <i>Nursing Informatics Laboratory, Inha University</i>	January 2022 - June 2023 <i>Incheon, South Korea</i>
<ul style="list-style-type: none">• Development of fall statement detection model using BERT-based models• Development of named entity recognition model for automatic fall report generation• Network analysis for drug prescription patterns	
Intelligent Clinical Guidance System Development <i>Nursing Informatics Laboratory, Inha University</i>	August 2021 - December 2021 <i>Incheon, South Korea</i>
<ul style="list-style-type: none">• Topic-modeling for insightful medical data analysis	
Smart Port Traffic Control System <i>ICT Mentoring, The Federation of Korean Information Industries</i>	April 2021 - November 2021 <i>Seoul, South Korea</i>
<ul style="list-style-type: none">• Development of a deep learning-based system for real-time detection of parking conditions• Development of a real-time parking lane recognition algorithm through image processing	

CONFERENCES

- [1] Insook Cho, EunJu Lee, and **Dong-geon Lee**. Effects of Language Differences on Inpatient Fall Detection Using Deep Learning. *MedInfo 2023: The 19th World Congress on Medical and Health Informatics*, Sydney, Australia, July 2023. (Poster)
- [2] **Dong-geon 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*, Chicago, United States, May 2023. (Peer Reviewed, Oral Presentation)
- [3] Changhun Koo*, Yoonjoo Jung*, and **Dong-geon 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*, Yeosu, South Korea, November 2021. (Oral Presentation, *: Co-First Author)

PATENT

- [1] System for providing parking information and control method. *KR-Application No. 10-2021-0178090*, South Korea, December 2021.

CERTIFICATIONS

- [1] **Algorithms 1, 2**. *POSTECH STAR-MOOC*, October 2023.
- [2] **Deep Learning Course (Advanced)**. *Inha Innovation Sharing University for Future Vehicle Technology*, January 2023.
- [3] **Building Transformer-Based Natural Language Processing Applications**. *NVIDIA Deep Learning Institute*, August 2022.
- [4] **Fundamentals of Deep Learning**. *NVIDIA Deep Learning Institute*, August 2022.
- [5] **Amazon Web Services (AWS) Machine Learning Course**. *Inha Innovation Sharing University for Future Vehicle Technology*, February 2022.
- [6] **Understanding Deep Learning**. *Hancom Academy*, February 2022.

SCHOLARSHIPS

- Received a **research scholarship** for on-campus undergraduate researchers (Spring 2023)
- Received **on-campus extracurricular activities scholarships** (Fall 2021, Fall 2022)

TEACHING EXPERIENCES

Teaching Assistant	March 2023 - Present
<i>Dept. of Information and Communication Engineering, Inha University</i>	<i>Incheon, South Korea</i>

- ICE2004: Data Structure (Fall 2023)
- ICE4016: Database Capstone Design (Fall 2023)
- ICE1005: Introduction to AI, Programming (Spring 2023)
- ICE3020: Algorithm Capstone Design (Spring 2023)

Computer Programming Instructor (Part-time)	October 2021 - May 2023
<i>Jamcoding, Co., LTD</i>	<i>Seoul, South Korea</i>

- Data Analysis and Visualization
- Programming and Algorithms - Python & C

TECHNICAL SKILLS

- **Programming Languages:** Python, C++, C, JavaScript, Shell Script
- **Frameworks and Libraries:** PyTorch, Keras, TensorFlow, Hugging Face, OpenCV
- **Systems and Tools:** Git, Linux, MySQL, AWS, Arduino, L^AT_EX

LANGUAGE SKILLS

English

- Obtained an **IH (Intermediate High) OPIc grade**; *proficient communication on diverse subjects*, in August 2023
- Obtained a **805 TOEIC score**; *advanced working proficiency*, in February 2023