Dong-geon Lee

lee.dg.125@gmail.com (<u>GitHub</u>, <u>LinkedIn</u>)

Research Interests

Deep learning, Natural language processing, Semi-supervised learning

EDUCATION

B.S. in Information and Communication Engineering Inha University

March 2018 - Present Incheon, South Korea

- Expected Graduation Date: February 16, 2024
- GPA: 3.77 / 4.5
- Relevant Coursework: AI Applications, Data Structure, Algorithm Capstone Design, Signals and Systems, Database Capstone Design, Object Oriented Programming

RESEARCH EXPERIENCES

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

Projects

Big Data-Driven Aviation Safety Management Technology Data Intelligence Laboratory, Inha University

November 2022 - Present Incheon, South Korea

• Development of keyphrase extraction model through semi-supervised learning

FallSafe: Reducing Falls with Clinical Data

August 2021 - June 2023

Nursing Informatics Laboratory, Inha University

Incheon, South Korea

- Development of deep learning-based fall statement detection model
- Development of NER model for automatic fall report generation
- Network analysis for drug prescription patterns

Intelligent Clinical Guidance System Development

August 2021 - December 2021

Incheon, South Korea

Nursing Informatics Laboratory, Inha University

• Topic-modeling for insightful medical data analysis

Smart Port Traffic Control System

April 2021 - November 2021 Sejong, South Korea

ICT Mentoring, Ministry of Science and ICT

• Development of a deep learning-based system for real-time detection of parking conditions

• Development of a real-time lane recognition algorithm through image processing

Conferences

- [1] Insook Cho, Eun Ju 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, 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)

TEACHING EXPERIENCES

Teaching Assistant of **ICE1005: Introduction to AI Programming** Spring 2023

Dept. of Information and Communication Engineering, Inha University Incheon, South Korea

Teaching Assistant of ICE3020: Algorithm Capstone Design

Dept. of Information and Communication Engineering, Inha University

Incheon, South Korea

Computer Programming Instructor (Part-time) October 2021 - May 2023

Jamcoding, Co., LTD Seoul, South Korea

• Courses: Data Analysis and Visualization, Programming and Algorithms (Python & C)

TECHNICAL SKILLS

- **Programming Languages**: Python, C++, C, JavaScript
- Frameworks and Libraries: PyTorch, Keras, TensorFlow, KoNLPy, OpenCV
- Systems and Tools: Git, Linux, MySQL, AWS, Arduino, LATEX

CERTIFICATIONS

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

PATENT

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

LANGUAGE SKILLS

Advanced level of English proficiency demonstrated by a TOEIC score of 805 obtained in February 2023.