# 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: 3.68 / 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
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 Nata 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 ICT Mentoring, Ministry of Science and ICT

April 2021 - November 2021 Sejong, South Korea

- 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, 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, July 2023. (Accepted for 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.