# Dong-geon Lee

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#### RESEARCH INTERESTS

Deep learning, Natural language processing, Data science, Weakly-supervised learning

#### **EDUCATION**

# $\mathbf{B.S.}$ in Information and Communication Engineering

March 2018 - Present Incheon, South Korea

 $Inha\ University$ 

• 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

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

#### **PROJECTS**

Big Data-Driven Aviation Safety Management Technology November 2022 - Present Data Intelligence Laboratory, Inha University Incheon, South Korea

• Development of keyphrase extraction model through semi-supervised learning

## FallSafe: Reducing Falls with Clinical Data

August 2021 - Present Incheon, South Korea

Nursing Informatics Laboratory, Inha University

• Development of deep learning-based fall statement detection model

• Network analysis for drug prescription patterns

#### Intelligent Clinical Guidance System Development

August 2021 - December 2021

Nursing Informatics Laboratory, Inha University

Incheon, South Korea

• Topic-modeling for insightful medical data analysis

#### Smart Port Traffic Control System

April 2021 - November 2021

 $ICT\ Mentoring,\ The\ Federation\ of\ Korean\ Information\ Industries$ 

Seoul, 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, Accepted for 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 - Present 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, Amazon Web Services, 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.