Dong-geon Lee

lee.dg.125@gmail.com
(GitHub, LinkedIn)

Research Interests

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

Education

B.S. in **Information and Communication Engineering** March 2018 - Present
Inha University *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: Prof. Wonik Choi) November 2022 - Present
Data Intelligence Laboratory, Inha University *Incheon, South Korea*

Research Assistant (Advisor: Prof. Insook Cho) August 2021 - Present
Nursing Informatics Laboratory, Inha University *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
Nursing Informatics Laboratory, Inha University *Incheon, South Korea*

- 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, Ministry of Science and ICT *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, 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** Spring 2023
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, 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.