Dong-geon Lee

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

Research Interests

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

Education

Inha University Incheon, South Korea
Bachelor of Science in Information and Communication Engineering *March 2018 - Present*

- 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, Incheon, South Korea
Research Intern (Advisor: Prof. Wonik Choi) *November 2022 - Present*

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

Projects

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

- Development of keyphrase extraction model through semi-supervised learning

FallSafe: Reducing Falls with Clinical Data Incheon, South Korea
Nursing Informatics Laboratory *August 2021 - Present*

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

Intelligent Clinical Guidance System Development Incheon, South Korea
Nursing Informatics Laboratory *August 2021 - December 2021*

- Topic-modeling for insightful medical data analysis

Smart Port Traffic Control System Seoul, South Korea
ICT Mentoring, The Federation of Korean Information Industries *April 2021 - November 2021*

- 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 as 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. - Accepted as Oral Presentation (Peer Reviewed)

[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. (*: Co-First Author) - Oral Presentation

Teaching Experiences

Teaching Assistant — Incheon, South Korea
Information and Communication Engineering, Inha University — *March 2023 - Present*

- Courses: *Algorithm Capstone Design, Introduction to AI Programming*

Computer Programming Instructor (Part-time) — Seoul, South Korea
Jamcoding, Co., LTD — *October 2021 - Present*

- Courses: *Data Analysis and Visualization, Python&C Programming and Algorithms*

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

Certification and License

[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.