

# Dong-geon Lee

lee.dg.125@gmail.com

( [GitHub](#), [LinkedIn](#), [Personal Website](#) )

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## RESEARCH INTERESTS

Deep learning, Natural language processing, AI systems and applications

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## EDUCATION

<b>B.S. in Information and Communication Engineering</b> <i>Inha University</i>	March 2018 - Present <i>Incheon, South Korea</i>
<ul style="list-style-type: none"><li>• Expected Graduation Date: February 16, 2024</li><li>• GPA: 3.77 / 4.5 (Major GPA: 3.89 / 4.5)</li><li>• Relevant Coursework: <i>AI Applications, Data Structure, Algorithm Capstone Design, Introduction to Probability and Statistics, Signals and Systems, Database Capstone Design</i></li></ul>	

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## RESEARCH EXPERIENCES

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

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## PROJECTS

<b>Big Data-Driven Aviation Safety Management Technology</b> <i>Data Intelligence Laboratory, Inha University</i>	March 2023 - Present <i>Incheon, South Korea</i>
<ul style="list-style-type: none"><li>• (Ongoing) Development of keyphrase extraction model through semi-supervised learning</li></ul>	
<b>FallSafe: Reducing Falls with Clinical Data</b> <i>Nursing Informatics Laboratory, Inha University</i>	January 2022 - June 2023 <i>Incheon, South Korea</i>
<ul style="list-style-type: none"><li>• Development of deep learning-based fall statement detection model</li><li>• Development of NER model for automatic fall report generation</li><li>• Network analysis for drug prescription patterns</li></ul>	
<b>Intelligent Clinical Guidance System Development</b> <i>Nursing Informatics Laboratory, Inha University</i>	August 2021 - December 2021 <i>Incheon, South Korea</i>
<ul style="list-style-type: none"><li>• Topic-modeling for insightful medical data analysis</li></ul>	
<b>Smart Port Traffic Control System</b> <i>ICT Mentoring, Ministry of Science and ICT</i>	April 2021 - November 2021 <i>Sejong, South Korea</i>
<ul style="list-style-type: none"><li>• Development of a deep learning-based system for real-time detection of parking conditions</li><li>• Development of a real-time lane recognition algorithm through image processing</li></ul>	

## CONFERENCES

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- [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, Australia, 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

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| <b>Teaching Assistant of ICE1005: Introduction to AI Programming</b>                               | Spring 2023                 |
| <i>Dept. of Information and Communication Engineering, Inha University</i>                         | <i>Incheon, South Korea</i> |
| <br><b>Teaching Assistant of ICE3020: Algorithm Capstone Design</b>                                | <br>Spring 2023             |
| <i>Dept. of Information and Communication Engineering, Inha University</i>                         | <i>Incheon, South Korea</i> |
| <br><b>Computer Programming Instructor (Part-time)</b>   | <br>October 2021 - May 2023 |
| <i>Jamcoding, Co., LTD</i>   | <i>Seoul, South Korea</i>   |
| <br>• Courses: <i>Data Analysis and Visualization, Programming and Algorithms (Python &amp; C)</i> |                             |

## TECHNICAL SKILLS

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- **Programming Languages:** Python, C++, C, JavaScript
- **Frameworks and Libraries:** PyTorch, Keras, TensorFlow, KoNLPy, OpenCV
- **Systems and Tools:** Git, Linux, MySQL, AWS, Arduino, L<sup>A</sup>T<sub>E</sub>X

## CERTIFICATIONS

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- [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

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

## LANGUAGE SKILLS

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### English

- Obtained an **IH (Intermediate High) OPIc grade**; *proficient communication on diverse subjects*, in August 2023
- Obtained a **805 TOEIC score**; *advanced working proficiency*, in February 2023