

Jisang Lee

☎ +82 10-9758-7656 | ✉ 30251274@edu.hanbat.ac.kr | Artificial Intelligence & Media Lab. (AIMLab)

Education

Hanbat National University (Advisor: Prof. Haneol Jang)

M.S. Student in Computer Engineering

Daejeon

Mar. 2026 - Present

GPA 4.5/4.5

Hanbat National University (Advisor: Prof. Haneol Jang)

B.S. in Computer Engineering

Daejeon

Mar. 2019 - Feb. 2026

GPA 4.09/4.5 (Major: 4.28/4.5)

Publications

Conference

- [1] Eojin Jang, **Jisang Lee**, DongSu Kim, SeoYeon Oh, and Haneol Jang, "Development of Optical Character Recognition Model for Document Leak Investigation", *2022 Korean Digital Forensic Society Winter Conference*, Dec 2022.
- [2] SeoYeon Oh, **Jisang Lee**, DongSu Kim, and Haneol Jang, "Lightweight Deep Convolutional Neural Networks for Fine-Grained Leaf Classification", *The 33rd Joint Conference on Communications and Information*, Apr 2023.
- [3] **Jisang Lee**, DongSu Kim, SeoYeon Oh, and Haneol Jang, "Lightweight Fingerprint Forgery Detection Technique Utilizing Median Filter and Ensemble Model", *2023 Korean Digital Forensic Society Summer Conference*, Jun 2023.
- [4] DongSu Kim, **Jisang Lee**, SeoYeon Oh, and Haneol Jang, "Effective Data Augmentations for Fingerprint Recognition", *2023 Korean Digital Forensic Society Summer Conference*, Jun 2023.
- [5] HyeongWon Seo, **Jisang Lee**, DongSu Kim, SeoYeon Oh, and Haneol Jang, "Effective Detection of Generated Images Using Fast Fourier Transform and Discrete Cosine Transform", *2023 Korean Digital Forensic Society Winter Conference*, Dec 2023.
- [6] **Jisang Lee**, HyeongWon Seo, and Haneol Jang, "Crop-Paste Technique for Enhancing Object Detection Performance in Synthetic Aperture Radar Images", *Korea Computer Congress 2024*, Jun 2024.
- [7] HyeongWon Seo, **Jisang Lee**, and Haneol Jang, "Data Preprocessing and Augmentation Methods for SAR to Optical Image Translation", *Korea Computer Congress 2024*, Jun 2024.

Journal

- [1] **Jisang Lee**, DongSu Kim, SeoYeon Oh, and Haneol Jang, "Lightweight Technique for Forged Fingerprint Detection Using Ensemble Models and Median Filters", *Journal of Digital Forensics (KCI)*, 2023.
- [2] DongSu Kim, **Jisang Lee**, SeoYeon Oh, and Haneol Jang, "Effective Data Augmentations for Cross-Domain Fingerprint Recognition", *Journal of Digital Forensics (KCI)*, 2024.
- [3] **Jisang Lee**, H. Kim, J. Koo, H. Choi, and D.Y. Jeong, "Parcel-Based Crop Type Classification in UAV Imagery with SAM for Smallholder Farms", *Korean Journal of Remote Sensing (SCOPUS)*, 2024.
- [4] HyeongWon Seo, DongSu Kim, SeoYeon Oh, **Jisang Lee**, and Haneol Jang, "Effective Detection of Generated Images Using Fast Fourier Transform and Discrete Cosine Transform", *Journal of KIISE (JOK)*, 2025.
- [5] **Jisang Lee**, HyeongWon Seo, WooJin Park, HyunCheol Choi, KyeongHo Kim, EunKyung Kim, and Haneol Jang, "Crop-Paste Data Augmentation Technique for Enhancing Object Detection Performance in Synthetic Aperture Radar Images", *Journal of IEEE (KCI)*, 2025.
- [6] J.H. Park, **Jisang Lee**, S.M. Pyo, and Haneol Jang, "Enhanced Copy-Paste Data Augmentation Using SAM for Precise Ship Detection", *Journal of IEEE (KCI)*, 2025.

Research Experience

SI Analytics

Research Intern

Daejeon, Republic of Korea

Jul. 2024 - Sep. 2024

- Worked on UAV image segmentation and classification
- Conducted research on remote sensing image analysis

Research Projects

Deep Learning Research for X-ray Diagnosis of Neonatal Respiratory Distress Syndrome(RDS)

Chungnam National University Hospital

Jan. 2023 - Jul. 2023

- Segmented X-ray images to isolate the lung regions
- Enhanced performance through classification network training
- Used Grad-CAM for analysis

Research on SAR Image Analysis and Semantic Segmentation

Capstone Design

Jan. 2024 - Dec. 2024

- Explored SAR image preprocessing techniques
- Investigated despeckling and scaling techniques for SAR images
- Devised generative models and data augmentation techniques for training data acquisition
- Improved SAR segmentation performance through knowledge distillation

Open-Vocabulary Zero-Shot Detection for Military Objects

Collaborative Research with DataMaker

Jan. 2025 - Oct. 2025

- Conducted collaborative research on open-vocabulary zero-shot detection for military objects
- Studied open-vocabulary recognition and detection strategies for unseen military targets
- Built and analyzed experimental pipelines for robust zero-shot military object understanding
- Investigated vision-language based approaches for military AI applications

Awards and Honors

Competition Award	President’s Award(한밭대학교 총장상), 2022 Creative Design Online Competition	Nov 2022
Competition Award	Chairman’s Prize, SW-univ AI Competition 2022	Aug 2022
	광학 문자 인식(Optical character recognition; OCR) 알고리즘 개발	
Best Paper Award	President’s Award, Development of Optical Character Recognition Model for Document Leak Investigation	Dec 2022
Competition Award	Prize, Computer Engineering Portfolio Competition	2022
Best Paper Award	Commissioner General Award(해양경찰청장상), Lightweight Fingerprint Forgery Detection Technique Utilizing Median Filter and Ensemble Model	Jun 2023
Competition Award	Corporate Prize (덱노이드), SW-univ AI Competition 2023	Aug 2023
	(위성 이미지 건물 영역 분할(Image Segmentation) AI모델 개발)	
Best Paper Award	President’s Award, Effective Detection of Generated Images Using Fast Fourier Transform and Discrete Cosine Transform	Dec 2023
Competition Award	Prize, Computer Engineering Portfolio Competition	2023
Competition Award	Grand Prize, Research and Development Special Zone Promotion Foundation	Apr 2024
	(글로벌 산불 감지 챌린지: AI를 활용한 향상된 위성 이미지 분석)	
Competition Award	Gold Prize, Capstone Design Exhibition (SkyPixel)	2024
Competition Award	Prize, Computer Engineering Portfolio Competition	2024

Technical Skills

Programming	Python, Java, C, C++
Professional Softwares	PyTorch
Languages	Korean(Native), English(Beginner)

Teaching Experiences

Hanbat AI Intensive Course	Hanbat National University
Teaching Assistant (Prof. Haneol Jang)	Jan. 2023
Data Structure Class	Hanbat National University
Teaching Assistant (Prof. Haneol Jang)	Mar. 2023 - Jun. 2023

Artificial Intelligence and Applications Class

Teaching Assistant (Prof. Haneol Jang)

Hanbat National University

Mar. 2024 - Jun. 2024

Artificial Intelligence and Applications Class

Teaching Assistant (Prof. Haneol Jang)

Hanbat National University

Mar. 2025 - Jun. 2025