

Junghye Kim

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github.com/junghye01

EDUCATION

M.S. in Artificial Intelligence, Korea University, Seoul, Korea

Sep. 2025 - Present

Advisor : Sungwoong Kim, Sungbin Lim

Research Focus : Multimodal Learning, Video Understanding, and Visual Reasoning

B.S. in Dongguk University, Seoul, Korea

Feb. 2020 - Feb. 2024

Department of Information & Communication Engineering

Double major in DataScience software

Cumulative GPA: 4.26/4.5

Honors : Summa Cum Laude

RESEARCH INTERESTS

Video understanding, multimodal reasoning, fine-grained human-object interaction, temporal video understanding, and causal reasoning

RESEARCH EXPERIENCE

Research Intern, AGILAB, Korea University

Apr. 2025 - Aug. 2025

Conducted research on video reward modeling for capturing fine-grained temporal dynamics and efficient inference techniques for large language models.

Researcher, Seoul Asan Medical Center

Aug. 2024 - Apr. 2025

Conducted CT-based cancer diagnosis research by developing a 3D benign lymph node segmentation model and a weakly supervised liver tumor segmentation model using synthetic tumor generation.

Research Intern, MEDAI

Nov. 2023 - Dec. 2023

Conducted research on CT reconstruction and a self-supervised CT image interpolation framework using image masked modeling.

Researcher, Wbridge Engineering Research Program

Apr. 2023 - Oct. 2023

Developed an adaptive prompt-matching technique that dynamically applies prompts based on question types; resulted in a publication in KSC 2023.

Research Intern, Data Analysis & Machine Intelligence LAB, Dongguk University

Jan. 2023 - Oct. 2023

Conducted research on hierarchical network attack classification and long-tailed multi-label image classification.

Research Intern, NIA AI Data Construction Project

Aug. 2022 - Dec. 2022

Conducted research on 3D human action analysis by developing the DGU-HAO benchmark dataset and systematically evaluating its effectiveness using skeleton-based action recognition models; resulted in a publication in IEEE Access.

PUBLICATIONS

Plan-and-Verify Video Reward Reasoning with Spatio-Temporal Scene Graph Grounding

Hyomin Kim*, [Junghye Kim](#)*, Joanie Hayoun Chung, Yoonjin Oh, Kyungjae Lee, Sungbin Lim, Sungwoong Kim.
arXiv preprint, 2606.11838. (* Equal contribution)

DGU-HAO : A Dataset with Daily Life Objects for Comprehensive 3D Human Action Analysis

Jiho Park, [Junghye Kim](#), Yujung Gil, Dongho Kim
IEEE ACCESS, 2024

APMT : Adaptive Prompt-Matching Technique to enhance your answers

Yunji Kim, [Junghye Kim](#)*, Yeosol Heo*, Jihie Kim (* : Equal Contribution)

PATENTS

Apparatus and Method of Classifying and Detecting Real-Time Abnormal Behavior Based on Artificial Intelligence
(No. 10-0004987(2024)) (Submitted) Sangsoo Lim, Junghye Kim, Junho Choi, Seunghyeon Jung

CERTIFICATIONS

Advanced Data Analytics Semi-Professional(ADsP) Certification FEB 2022

TEACHING EXPERIENCE

‘Machine Learning and Data Science’ - Teaching Assistant SEP 2023- DEC 2023
- Led practical sessions applying machine learning algorithms to real-world datasets

Wbridge,Korean Women in Science and Technology Foundation - Mentor APRIL 2023- OCT 2023
- Mentored high school students on open-source project development and collaboration using Git and GitHub
- Guided students in research team participation and study engagement

‘Open source Software Practice’ - Teaching Assistant MAR 2023- JUNE 2023
- Led practical sessions on Docker-based deployment of Flask web applications
- Mentored 50 students through Q&A and interactive discussions

HONORS AND AWARDS

2024 Dongguk University Summa cum laude
2022 Dongguk University Academic Excellence Scholarship
2021 Top Student Scholarship by Course (‘General Physics and Experiment 2’)

LANGUAGE PROFICIENCY

Fluent in **English(TOEIC 905)** and Native in **Korean**

TECHNICAL SKILLS

Languages: Python, C, Javascript
Tools : Deep Learning Frameworks, Deep Learning Libraries (opencv, numpy, transformers, matplotlib), Version Control & Collaboration tools (Git & Github, Jenkins, AWS, Docker)