Kangsan Kim

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Research Interests

My research interest lies in developing AI assistants that understand the world and interact with humans through visual data. Previous works focus on video understanding for real-world applications, including out-of-domain video understanding and video-based multimodal RAG. I am also interested in embodied MLLMs that operate on egocentric video with strong spatial reasoning ability.

Education

KAIST Seoul, S. Korea

Ph.D. in Artificial Intelligence Mar 2024 - Present

Advisor: Prof. Sung Ju Hwang

KAIST

Daejeon, S. Korea

B.S. in Computer Science Mar. 2018 - Feb. 2024

Minor in Business and Technology Management

Experience

New York University

Brooklyn, NY, United States

Visiting Student (Adviser: Prof. Mengye Ren)

Jul 2025 - Current

Studying question answering over egocentric video streams from multiple embodied agents.

B GARAGE San Jose, CA, United States

Computer Vision Engineer Intern

Oct 2022 - Jul 2023

Developed an ultra-fast edge instance segmentation model that can segment anything in the warehouse.

NAVER (Papago) Remote

Machine Learning(NLP) Scientist Intern

Jul 2021 - Nov 2021

Built and improved end-to-end Korean-English speech translation model.

Publications

HoliSafe: Holistic Safety Dataset and Benchmark for Vision-Language Models

Youngwan Lee, <u>Kangsan Kim</u>, Kwanyong Park, Ilchae Jung, Soojin Jang, Seanie Lee, Yong-Ju Lee, Sung Ju Hwang

Under review, 2025

UniversalRAG: Retrieval-Augmented Generation over Multiple Corpora with Diverse Modalities and Granularities

Woongyeong Yeo*, <u>Kangsan Kim*,</u> Soyeong Jeong, Jinheon Baek, Sung Ju Hwang Under review, 2025

VideoRAG: Retrieval-Augmented Generation over Video Corpus

Soyeong Jeong*, Kangsan Kim*, Jinheon Baek*, Sung Ju Hwang

Findings of the Association for Computational Linguistics (ACL Findings), 2025

VideoICL: Confidence-based Iterative In-context Learning for Out-of-Distribution Video Understanding

Kangsan Kim*, Geon Park*, Youngwan Lee, Woongyeong Yeo, Sung Ju Hwang Conference on Computer Vision and Pattern Recognition (CVPR), 2025

^{*:} equal contribution

Honors

Qualcomm-KAIST Innovation Award, 2023 Dean's List, College of Engineering, 2020 Spring