

Byeongjin Kang

📍 Seoul, South Korea ✉ namul2@yonsei.ac.kr 🌐 website in Byeongjin Kang

Who am I?

I'm a **deeply curious person** with a passion for new knowledge. I love exploring any topic that piques my interest, no matter the field. Rather than sticking to a single path, I enjoy solving problems by **blending diverse knowledge** and finding new ways forward. My ultimate dream is to create an AI that can think and act like a human, even if imperfectly. Sometimes I joke that I'm just a human trying to **reverse-engineer myself**.

Education

Yonsei University <i>M.S./Ph.D. Integrated Program in Artificial Intelligence</i>	Mar 2026 – Present <i>Seoul, South Korea</i>
Sungkyunkwan University <i>B.S. in Computer Science and Engineering ★ Magna Cum Laude</i> * Leave of absence for military service: Oct 2021 - July 2023	Mar 2020 – Feb 2026 <i>Suwon, South Korea</i>

Research Interests

My research focuses on **Robot Learning** and **Perception**, developing AI systems that perceive and understand the real world through spatial reasoning from multimodal sensor data. I aim to create frameworks where perception enables intelligent robotic behavior to solve **complex real-world problems**.

Keywords: Reinforcement Learning, Imitation Learning, Computer Vision, Representation Learning

Experience

Research Intern <i>Korea Electronics Technology Institute (KETI)</i>	Aug 2026 – Present
Undergraduate Research Assistant <i>Yonsei University V-Lab (advised by Prof. Eunbyung Park)</i>	Oct 2025 – Feb 2026
Undergraduate Research Assistant <i>Yonsei University RLLAB (advised by Prof. Youngwoon Lee)</i>	Jan 2025 – Apr 2025
Industry-Academic Research Project <i>Sungkyunkwan University CSILAB (advised by Prof. Yusung Kim)</i>	Jun 2024 – Dec 2024

Projects

Morphology-Aware Efficient Transformer for Robot Learning

Investigated morphology-aware dynamic attention masking for reinforcement and imitation learning in high-dimensional state and action spaces, focusing on reducing redundant Transformer computation and improving temporal efficiency by exploiting the robot's physical structure.

Visual Robustness in Imitation Learning

Improved imitation learning robustness under visual perturbations, achieving an 80% success rate in visually noisy environments compared to 10% with the baseline ACT model.

Efficient Long-Text Summarization with Small Language Models

Developed a segmentation-based pipeline for long-text summarization using a 0.5B-parameter language model while maintaining stable generation across long inputs.

Skills

Programming Languages: C, C++, Java, Python (Pytorch, Numpy)

Languages: Korean (Native), English (Proficient)