TAEYUN HA

Undergraduate
Department of Electrical and Computer Engineering
Seoul National University

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RESEARCH INTERESTS

Dexterous manipulation, Scaling human-to-robot learning

EDUCATION

Seoul National University, South Korea | Mar.2020 – Present | Undergraduate
Department of Electrical and Computer Engineering
Expected Graduation Date: August 2026

The University of Texas at Austin, USA | Aug.2024 – Dec.2024 | Undergraduate Exchange student
Department of Electrical and Computer Engineering

Hansung Science High School, South Korea | Mar.2018 – Feb.2020 | Specialization in Physics, Math

EXPERIENCE

Research Intern @ Visual Computing Lab in SNU | Jan.2026 – Current
- Scalable human demonstration capture in multi-camera system

Internship @ RLWRLD | Jun.2025 – Aug.2025 | Seoul, South Korea
- B2B Data Collection Project for dexterous robotic hands manipulation
- ARPA-H Project: Humanoid robot assisted surgery

Research Intern @ MINIMAX Lab in UT Austin | Dec.2024 – Apr.2025 | Austin, TX, USA
- Project: *Automated 2D Material Exfoliation System & Deep Learning based Flake Detection*
  - Designed a control system for hardware that exfoliates 2D materials (graphene, hBN, etc.) from their raw materials.
  - Implemented a Mask2Former-based instance segmentation model that detects flakes and classifies them by layer thickness

LG AI Youth Camp Mentor | Feb.2024 – May.2024 | Seoul, South Korea
- Mentored students who demonstrated talent in the field of AI during a 3-month program

Thermal Observation Device (TOD) Operator @ Republic of Korea Army | Oct.2021 – Apr.2023 | Yangyang, South Korea
- Project: *Deep Learning & 3D Modeling based Restoring the shape of unknown objects using Laser Range Finder (2022)*
  - Proposed a Deep Learning based 3D scanner solution for a military Thermal Observation Device (TOD).

PERSONAL PROJECTS

VR Electric Scooter Simulator (2024)
- Developed a full-scale scooter simulator hardware and a Unity-based VR simulation that are interconnected.
- Designed an automatic control system that controls the behavior of hardware based on sensor signals.

Deep Learning based Object Detection for Drones & Embedded System Design using FPGA board (2020)
- Developed YOLOv4-based object detection model, including key tasks such as data augmentation and model compression.
- Implemented an FPGA-based system using Verilog to deploy the deep learning model, optimizing for accuracy, throughput, and energy efficiency.

HONORS & AWARDS

Gold Prize (2nd place) in SNU Engineering Creative Design Fair (2024)
- Issued by Dean, College of Engineering, Seoul National University

Scholarship student of the 1st Korea-U.S. Student Exchange program in the field of high-tech industry (2024)
- Issued by Minister of Trade, Industry and Energy, Republic of Korea, $9,000

2nd Prize in Korea-Israel Military Start-up Contest (2022)
- Issued by president of *The Korea Economic Daily (Hankyung)*, $2,000

1st Prize in AI System Design Contest (2020)
- Issued by Seoul National University, College of Engineering, System Semiconductor Engineering for AI

Academic Excellence Scholarship (Spring 2021, Spring 2024, Fall 2024, Fall 2025)
- Issued by Seoul National University

EXTRACURRICULAR ACTIVITIES

Sigma Intelligence (Mar.2023 – Present)
- SNU Robot making club