

Yunghee Lee

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Google Scholar: scholar.google.com/citations?user=yfW LZ_OAAAAJ | **GitHub:** github.com/yhlee-add

Education

Korea Advanced Institute of Science and Technology (KAIST)

Mar 2020 – Feb 2024

- B.S. in Computing with a minor in Physics, *summa cum laude*, GPA: 4.17/4.3

Daejeon, Republic of Korea

Publications

C: Conference, W: Workshop, J: Journal

[W3] **Rethinking FID Through the Geometry of the Reference Dataset**

Yunghee Lee, Byeonghyun Pak

ICML Workshop on Combining Theory and Benchmarks (CTB), 2026 [[paper](#)]

[W2] **Pixel-level Scene Understanding in One Token: Visual States Need What-is-Where Composition**

Seokmin Lee, *Yunghee Lee*, Byeonghyun Pak, Byeongju Woo

CVPR Workshop on Pixel-level Video Understanding in the Wild (PVUW), 2026 [[paper](#)] [[page](#)]

[C1] **Tortoise and Hare Guidance: Accelerating Diffusion Model Inference with Multirate Integration**

Yunghee Lee, Byeonghyun Pak, Junwha Hong, Hoseong Kim

Neural Information Processing Systems (NeurIPS), 2025 [[paper](#)] [[page](#)]

[W1] **IVS: A Learned Video Storage for Fast and Efficient Video Understanding**

Yunghee Lee, Jongse Park

CVPR Workshop on Efficient Deep Learning for Computer Vision (ECV), 2024 [[paper](#)] [[talk](#)]

[J1] **HybGrasp: A Hybrid Learning-to-Adapt Architecture for Efficient Robot Grasping**

Jungwook Mun, Khang Truong Giang, *Yunghee Lee*, Nayoung Oh, Sejoon Huh, Min Kim, Sungho Jo

IEEE Robotics and Automation Letters (RA-L), 2023 [[paper](#)]

Experience

Agency for Defense Development (ADD)

Jun 2024 – Present

Research Officer (First Lieutenant, Republic of Korea Army)

Daejeon, Republic of Korea

- Selected as one of 20 research officers nationwide for STEM-based national defense research
- Developed data storage and retrieval systems for surveillance UAVs
- Project: Synthetic Dataset Generation for Air Defense Systems
 - Constructed synthetic datasets for rare/low-visibility targets via **image/video diffusion models**
 - Accelerated the generation pipeline by $\approx 30\%$ with a novel **multirate integration** method
 - 1 Publication in NeurIPS 2025

Computer Architecture and Systems Lab @ KAIST

Jan 2023 – Mar 2024

Undergraduate Research Intern (advisor: Prof. Jongse Park)

Daejeon, Republic of Korea

- Project: Learned Video Storage for Video Understanding
 - Developed video storage systems that can **serve ML-based video features efficiently**
 - Built a feature fusion network and a cost model to **reconstruct features from subfeatures**
 - 1 Publication in ECV 2024

Neuro-Machine Augmented Intelligence Lab @ KAIST

Undergraduate Research Intern (advisor: Prof. Sungho Jo)

Jan 2022 – Aug 2022
Daejeon, Republic of Korea

- Project: Robot Grasping for Various Gripper Designs
 - Developed robotic arm control algorithms that can **adapt to different gripper designs**
 - Accelerated training data generation pipelines with multiprocessor and GPU parallelism
 - 1 Publication in RA-L 2023

Teaching Experience

KAIST SW Academy Jungle & KRAFTON Jungle

Teaching Assistant

Oct 2022 – Mar 2024
Daejeon, Republic of Korea

- Mentored students through the pintos-kaist operating system project [\[link\]](#)
- Modernized the project codebase by fixing compatibility issues

KAIST CS101: Introduction to Programming

Teaching Assistant

Mar 2021 – Feb 2022
Daejeon, Republic of Korea

- Managed weekly lab sessions and grading

Honors & Awards

Chief of Naval Operations Award

Republic of Korea Navy

Nov 2024

- Third place in the Military AI Contest (MAICON)

Korea National Scholarship of Excellence in Science and Technology

Ministry of Science and ICT, Republic of Korea

Mar 2020 – Feb 2024

- Full-ride national scholarship awarded to top students in science and engineering

Minister of Science and ICT Award

Ministry of Science and ICT, Republic of Korea

Dec 2022

- First place in the miliTECH Challenge
- Project: Drone Control System for 3D Indoor Map Construction and Swarm Escape