Yunghee Lee

Location: Daejeon, Republic of Korea | **Email:** yhlee.add@gmail.com | **Website:** yhl.ee
Google Scholar: scholar.google.com/citations?user=yfWLZ_0AAAAJ | **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* Daejeon, Republic of Korea

Publications

C: Conference, J: Journal

[C2] **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 [link]

[C1] **LVS: 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 [link]

[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 [link]

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 System
  - Constructed synthetic datasets for rare/low-visibility targets via **image/video diffusion models**
  - Accelerated the generation pipeline by ≈**30%** with a novel **multi-rate integration** method
  - 1 Publication in NeurIPS 2025 [project page]

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 Jan 2022 – Aug 2022
Undergraduate Research Intern (advisor: Prof. Sungho Jo) 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