

Hyunsoo Lee

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EDUCATION

Seoul National University B.S. in Electrical and Computer Engineering Double Major in Mathematical Sciences <i>Absence due to compulsory military service (Aug 2023 - Feb 2025)</i>	Seoul, Korea Mar 2021 - Aug 2027 (Expected)
University of California, Irvine Studying Computer Engineering via UC Education Abroad Program	Irvine, CA Jan 2026 - Jun 2026
Hansung Science High School <i>Origin of my research in computer vision through early projects on visual understanding</i>	Seoul, Korea Mar 2018 - Feb 2021

PUBLICATIONS

- Hyunsoo Lee***, Farrin Marouf Sofian*, Kushagra Pandey, Stephan Mandt, *Variational Test-time Optimization for Diffusion Synchronization*, Under Review.
- Hyunsoo Lee**, Inwoo Hwang, Young Min Kim, *Accelerated Likelihood Maximization for Diffusion-based Versatile Content Generation*, in ECCV 2026.
- Daniel Geyfman*, Felix Draxler*, Jan Groeneveld*, **Hyunsoo Lee**, Theofanis Karaletsos, Stephan Mandt, *Calibrated Test-Time Guidance for Bayesian Inference*, in ICML 2026.
- Changwoon Choi*, **Hyunsoo Lee***, Clément Jambon, Yael Vinker, Young Min Kim, *Image-Guided Geometric Stylization of 3D Meshes*, in CVPR 2026.
- Junsung Lee*, **Hyunsoo Lee***, Yong Jae Lee, Bohyung Han, *Low-Resolution Editing is All You Need for High-Resolution Editing*, in CVPR 2026.
- Hyunsoo Lee**[†], Daeum Jeon, Hyeokjae Oh, *Point2Pose: A Generative Framework for 3D Human Pose Estimation with Multi-View Point Cloud Dataset*, in WACV 2026.
- Hyunjun Lee*, **Hyunsoo Lee***, Sookwan Han, *SyncSDE: A Probabilistic Framework for Diffusion Synchronization*, in CVPR 2025.
- Hyunsoo Lee**, Minsoo Kang, Bohyung Han, *Diffusion-Based Conditional Image Editing through Optimized Inference with Guidance*, in WACV 2025.
- Hyunsoo Lee***, Minsoo Kang*, Bohyung Han, *Conditional Score Guidance for Text-Driven Image-to-Image Translation*, in NeurIPS 2023.

(* Equal contribution / † Corresponding author.)

RESEARCH EXPERIENCES

SNU Machine Perception and Reasoning Lab Research Intern <ul style="list-style-type: none">Advisor: Jonghyun ChoiConducting research on neuroscience-motivated memory mechanisms for representation learning.	Seoul, Korea Jun 2026 - Present
UC Irvine Mandt Lab Research Intern <ul style="list-style-type: none">Advisor: Stephan MandtConducted research on guidance methods for diffusion models in inverse problems and collaborative generation.	Irvine, CA Jan 2026 - Jun 2026

SNU 3D Vision Lab

Research Intern

Seoul, Korea

Mar 2025 - Nov 2025

- Advisor: Young Min Kim
- Conducted research on geometry deformation and versatile content generation with diffusion models.

SNU Computer Vision Lab

Research Intern

Seoul, Korea

Jan 2023 - Aug 2023

- Advisor: Bohyung Han
- Conducted research on training-free, diffusion-based image-to-image translation.

AWARDS AND HONORS

Korean Institute of Communication Sciences (KICS) Scholarship (\$650)	Jun 2026
Korea–U.S. Advanced Technology Youth Exchange Program Scholarship (\$9,000)	Dec 2025
SNU College of Engineering Creative Design Fair (Silver Prize, Research Track)	Sep 2025
Presidential Science Scholarship (\$3,600)	Mar 2025
Young Engineers Honor Society (YEHS) , an honor society under NAEK	Mar 2025 - Present
SNU Tomorrow’s Edge Membership (STEM) , an honor society of SNU Engineering	Mar 2025 - Present
Google Student Travel Grant (\$1,500) , financial support for attending WACV 2025	Mar 2025
SNU Earth Science Online Hackathon (3rd Prize, \$2,000) , tackling scientific problems with AI	Sep 2022
SNU Merit-based Scholarship , scholarship for high-GPA students	Aug 2021 - Mar 2025

PROJECTS

Modality Translation through Conditional Encoder-Decoder	Mar 2023 - Jun 2023
<ul style="list-style-type: none">• Team project conducted in the “Machine Learning for Visual Understanding” course.• Proposed a diffusion-based conditional encoder-decoder to accurately align text and image embeddings.• Demonstrated that the proposed approach exhibited model-agnostic behavior and achieved performance comparable to state-of-the-art methods across various downstream tasks.	
OUTTA AI Bootcamp	Mar 2022 - Aug 2023
<ul style="list-style-type: none">• Served as an AI project team leader, coordinating and guiding 150 undergraduate students nationwide.• Developed a text-to-image (T2I) generation project using GANs, a pre-trained CLIP model, and contrastive learning for high-quality image synthesis.• Conducted AI seminars on machine learning, deep learning, and natural language processing.	

VOLUNTEERING EXPERIENCES

2025 Conference on Robot Learning (CoRL)	Seoul, Korea
Student Volunteer	Sep 2025
<ul style="list-style-type: none">• Worked as a student volunteer during CoRL 2025 workshop & main conference.	

ACADEMIC SERVICES

Reviewer	NeurIPS, ICLR, ECCV, TIP
Assistant TA	Introduction to Circuit Theory and Laboratory (2023)

SKILLS

Languages	Korean (Native), English (Fluent)
Programming	Python, C/C++, MATLAB, Git, PyTorch, TensorFlow, OpenCV