

MinKyu Lee

☎ (+82) 10-9488-7410 ◊ ✉ 2minkyulee@gmail.com ◊ 🌐 2minkyulee.github.io
in [LinkedIn](#) ◊ [G Google Scholar](#)

Education & Languages

Ph.D. in Artificial Intelligence ◦ Sungkyunkwan University (SKKU), GPA: 4.22/4.50 ◦ Advisor: Prof. Jae-Pil Heo	2023 - Present
M.S. in Artificial Intelligence ◦ Sungkyunkwan University (SKKU), GPA: 4.42/4.50 ◦ Advisor: Prof. Jae-Pil Heo	2021 - 2023
B.S. in Mathematics Computer Science (Double Major) ◦ Sungkyunkwan University (SKKU) ◦ GPA: Mathematics 3.80/4.50 Computer Science 4.05/4.50 Total 3.89/4.50	2017 - 2021
Language Proficiency ◦ OPIc: Advanced Low (AL) ◦ TOEIC: 955	2022 2024 2020

Publications

- ▶ SeaCache: Spectral-Evolution-Aware Cache for Accelerating Diffusion Models
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2026
Jiwoo Chung, Sangeek Hyun, MinKyu Lee, Byeongju Han, Geonho Cha, Dongyoon Wee, Youngjun Hong[†], Jae-Pil Heo[†]
[arXiv](#) / [Code](#) / [Project](#)
- ▶ Progressive Distractor Filtering for Robust 3D Gaussian Splatting
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) [Findings], 2026
Kangmin Seo, MinKyu Lee, Tae-Young Kim, ByeongCheol Lee, JoonSeoung An, Jae-Pil Heo[†]
- ▶ Analyzing the Training Dynamics of Image Restoration Transformers: A Revisit to Layer Normalization
International Conference on Learning Representations (ICLR), 2026
MinKyu Lee, Sangeek Hyun, Woojin Jun, Hyunjun Kim, Jiwoo Chung, Jae-Pil Heo[†]
[OpenReview](#) / [arXiv](#) / [Code](#)
- ▶ Diffusion Feature Field for Text-based 3D Editing with Gaussian Splatting
Neural Information Processing Systems (NeurIPS), 2025
Eunseo Koh, Sangeek Hyun, MinKyu Lee, Jiwoo Chung, Kangmin Seo, Jae-Pil Heo[†]
[OpenReview](#)
- ▶ Fine-Tuning Visual Autoregressive Models for Subject-Driven Generation
IEEE/CVF International Conference on Computer Vision (ICCV), 2025
Jiwoo Chung, Sangeek Hyun, Hyunjun Kim, Eunseo Koh, MinKyu Lee, Jae-Pil Heo[†]
Qualcomm Innovation Fellowship Korea 2025 Finalist
[Paper](#) / [arXiv](#) / [Code](#) / [Project](#)
- ▶ Auto-Encoded Supervision for Perceptual Image Super-Resolution
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025
MinKyu Lee, Sangeek Hyun, Woojin Jun, Jae-Pil Heo[†]
[Paper](#) / [arXiv](#) / [Poster](#) / [Code](#)
- ▶ Noise-free Optimization in Early Training Steps for Image Super-Resolution
AAAI Conference on Artificial Intelligence (AAAI), 2024
MinKyu Lee, Jae-Pil Heo[†]
[Paper](#) / [arXiv](#) / [Code](#)

Under Review

- ▶ Scalable GANs with Transformers
Sangeek Hyun, MinKyu Lee, Jae-Pil Heo[†]
[Project Page](#) / [arXiv](#)

- ▶ WavNAF: Learning Wave Propagation Priors for Neural Acoustic Fields
Taeho Kim, Hyunjun Kim, MinKyu Lee, SuBeen Lee, Inkyu An[†], Jae-Pil Heo[†]
- ▶ Improving Sparse-View 3DGS Generalization via Flat Minima Optimization
Kangmin Seo, Sangeek Hyun, MinKyu Lee, Jae-Pil Heo[†]

Projects

- Accelerating Generalizable 3D Gaussian Splatting in Human Novel View Synthesis** 2024 - Curr.
 - Supported by Electronics and Telecommunications Research Institute (ETRI)
 - Keywords: 3D Reconstruction, Generalizable Gaussian Splatting, TensorRT
- Detection of AI-based Fake Investigation and Tip Videos** 2021 - 2025
 - Supported by Korean National Police Agency and Ministry of Science and ICT (\$2.2M total)
 - Keywords: Deepfake Generation & Detection, Video Forgery Detection, Video Editing, Video-to-Video Translation
 - Awarded Outstanding Achievement in Social Problem-Solving R&D by the Minister of Science and ICT
- Efficient Magnetic Resonance Imaging (MRI) Restoration for Dementia Diagnosis** 2023
 - Supported by IITP and Seoul National University Hospital (SNUH)
 - Keywords: 3D Reconstruction, Lightweight Restoration Networks
- Real-World Optical Recognition for Tabular Equations** 2021
 - Supported by ITeX Solution
 - Keywords: OCR, Table Structure Recognition, Formula OCR

Activities

Reviewer

- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)
- International Conference on Learning Representations (ICLR)
- International Conference on Machine Learning (ICML)
- Neural Information Processing Systems (NeurIPS)

Teaching Assistant of AI Intensive Course in Sungkyunkwan University

- LG Electronics 2024 | 2022
- Samsung SDS 2022

Honors and Awards

- [Project] Outstanding Achievement in Social Problem-Solving R&D** 2024
 - Awarded by the Minister of the Ministry of Science and ICT
 - Related project: Detection of AI-based Fake Investigation and Tip Videos
- Scholarship for outstanding Ph.D. students** 2024 | 2023
 - Supported by department of artificial intelligence, Sungkyunkwan University
- Scholarship for outstanding M.S. students** 2022 | 2021
 - Supported by department of artificial intelligence, Sungkyunkwan University
- [Project] Selected as Outstanding Team in AI Grand Challenge** 2021
 - Held by Institute of Information & Communications Technology Planning & Evaluation (IITP)
 - 5th AI Grand Challenge Phase 1