Jaeha Kim

Contact Information

Affiliation:	Department of ECE, ASRI, Seoul National Unversity (SNU), Seoul, Korea
Address:	1 Gwanak-ro 133-508, Gwanak-gu, Seoul, Korea, 08826
Email:	jhkim97s2(at)gmail.com, hyjkim2(at)snu.ac.kr
Github:	https://github.com/JaehaKim97
Homepage:	https://JaehaKim97.github.io/

Education

Integrated Ph.D. program in Department of ECE Sep. 2019 – Present

Seoul National University (SNU), Seoul, Korea

Advisor: Kyoung Mu Lee

GPA 4.27 / 4.30

B.S. in Department of EE Mar. 2015 – Feb. 2019

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

GPA 4.10 / 4.30; Graduated with highest honors (*Summa Cum Laude*)

Nominated for outstanding academic performance (*Dean's List*)

International Publications (Selected)

- First author of Beyond Image Super-Resolution for Image Recognition with Task-Driven Perceptual Loss (**CVPR 2024**), *A new paradigm of super-resolution that is helpful for image recognition.*
- Co-first author of Recovering 3D Hand Mesh Sequence from a Single Blurry Image: A New Dataset and Temporal Unfolding (**CVPR 2023**), *A new practical problem, 3D hand pose estimation under a blur.*
- Co-first author of Toward Real-World Super-Resolution via Adaptive Downsampling Models (**TPAMI 2021**), *Modeling image degradation with GANs for real-world super-resolution.*

Research Interests

I am interested in low-level image restoration challenges utilizing deep learning approaches, including super-resolution, deblurring, and denoising. My specific focus is on the development of image restoration techniques at the application level. This involves: *real-world restoration*, which aims to reconstruct high-resolution images from real-world inputs, and *task-driven restoration*, which is designed to enhance the performance of high-level vision tasks. Additionally, I am also interested in generative models, such as Generative Adversarial Networks (GANs) and diffusion models, within the context of image processing.

Research Projects

Image Restoration for Improving Barcode Detection Performance Dec. 2021 – Nov. 2022

Hanwha Techwin

Efficient Vision Transformer for Image Super-Resolution May. 2021 – May. 2022

Naver

Object Re-Identification and Tracking on Drone Images Mar. 2019 – July. 2019

Artifical Intelligence Grand Challenge

Service

Conference Reviewer

CVPR, ECCV, ICCV — 2022 – Present

Journal Reviewer

TPAMI — 2022 – Present

Skills

Python, PyTorch, MATLAB, C++, LaTeX

Teaching Assistant

EE729.003: Advanced Issues in Computer Vision — Sep. 2021 – Dec. 2021

Seoul National University, Seoul, Korea

Scholarships

National Science & Technology Scholarship, Korea Student Aid Foundation — 2015 – 2019

Certifications

Test of English Proficiency (**TEPS**): 458/600 — Sep. 2020

Level 1, Near-Native Level of English Proficiency

Reference

Advisor Kyoung Mu Lee
Professor
Seoul National University
kyoungmu(at)snu.ac.kr
https://cv.snu.ac.kr/index.php/kmlee