Kim, Jiwon — M.S. student

M.S. Student, Laboratory of Image Processing Algorithm,
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Education

Korea University *Seoul, Korea*
M.S. in Department of Electrical Engineering 2024.09 - 2026.08 (expected)
Advisor: Kyong Hwan Jin

AJOU University *Suwon, Korea*
B.S. in Department of Electrical and Computer Engineering 2020.03 - 2024.02

Conference Publications

1. **Jiwon Kim**, Pureum Kim, SeonHwa Kim, Soobin Park, Eunju Cha, and Kyong Hwan Jin, *"Dual Recursive Feedback on Generation and Appearance Latents for Pose-Robust Text-to-Image Diffusion"*, IEEE/CVF International Conference on Computer Vision **(ICCV)**, 2025.
2. **Jiwon Kim**, Hyunmin Cho, Pureum Kim, and Kyong Hwan Jin, *"iOS: iterative Optimization Sampling in 3D"*, Summer Annual Conference of IEIE, 2025.
3. SeonHwa Kim, **Jiwon Kim**, Soobin Park, Donghoon Ahn, Jiwon Kang, Seungryong Kim, Kyong Hwan Jin, and Eunju Cha, *"Identity-preserving Distillation Sampling by Fixed-Point Iterator"*, IEEE/CVF Conference on Computer Vision and Pattern Recognition **(CVPR)**, 2025.

Preprints

1. **Jiwon Kim**, SeonHwa Kim, Soobin Park, Eunju Cha, and Kyong Hwan Jin, *"Semantic Alignment for Pose-Invariant Identity Preserving Diffusion"*.
2. Soobin Park, Seohyeon Yoo, **Jiwon Kim**, SeonHwa Kim, Kyong Hwan Jin, and Eunju Cha, *"SA-V2V: Training-Free Subject-Aware Video-to-Video Personalization"*.
3. Hyunmin Cho, Yongjun Lee, **Jiwon Kim**, Jaejun Yoo, and Kyong Hwan Jin, *"Grid Addressable Memory via Bit-Estimating Implicit Neural Representation"*.

Awards

- **Best Paper Award** , Summer Annual Conference of IEIE, 2025 2025.06
- **Gold Prize**, Best Paper Award, 37th Workshop of Image Processing and Image Understanding (IPIU) 2025.02

Experience

- Research Intern, On Road Intelligence Team, **Naver Labs** 2026.01 -

Patents

- Hyunmin Cho, Kyong Hwan Jin, Yongjun Lee, **Jiwon Kim**, and Woo Kyoung Han, "Method and Apparatus for Lossless Implicit Neural Representation Based on Bipolar Vector Labeling and Recursive Single Weight Operation", Korea Patent Application No. 10-2025-0150878

Projects

- Development of a Self-Learning World Model-Based AGI System for Hyperspectral Imaging, IITP (Institute of Information & Communications Technology Planning & Evaluation) 2025.07 -

Research Interests

Efficient and Controllable Generative Models
Developing lightweight, training-free diffusion models for real-time, high-fidelity image generation and editing. My research (DRF) on complex, user-guided manipulations (e.g., pose transfer, style fusion) is crucial for implementing advanced generative editing features directly.

Robust and High-Fidelity Image Editing
Investigating methods to ensure structural consistency and identity preservation during AI-powered image editing. My work on identity-preserving distillation sampling (IDS) aims to minimize artifacts and produce natural, reliable results for computational photography applications, including object removal and photo enhancement.

Multimodal Generative AI for Interactive Systems
Exploring the integration of vision, language, and 3D understanding to build versatile generative models that operate across diverse domains, from 2D images to 3D scenes. This research aims to pioneer next-generation interactive mobile experiences and new paradigms for the creation of digital content.

Technical Skills

Programming & Frameworks
Python, PyTorch, C, CUDA, Linux

AI Models & Techniques
Diffusion Models, Generative Adversarial Networks (GANs), Vision Transformers (ViT), Model Quantization & Pruning, Efficient Inference

Domains
Controllable Image Generation, Identity-Preserving Editing, 3D Scene Reconstruction, Image Super-Resolution

Teaching Experience

TA, Korea University
Engineering Mathematics II Autumn 2025

TA, Korea University
Signal and Systems Spring 2025

TA, AJOU University
Programming (using C) Spring 2023