

Jihwan Kim

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EDUCATION

- **Seoul National University** Seoul, Korea
M.S., Interdisciplinary Program in Artificial Intelligence *Sep. 2024 - Present*
Advisor: Prof. Bohyung Han
- **Seoul National University** Seoul, Korea
B.S., Department of Electrical and Computer Engineering *Mar. 2019 - Aug. 2024*
GPA: 4.09 (Major: 4.14) / 4.30, Graduated *Summa Cum Laude*
- **Daejeon Science High School** Daejeon, Korea
Science high school for gifted students in science and mathematics *Mar. 2016 - Feb. 2019*

RESEARCH INTERESTS

Autoregressive diffusion models, memory-augmented video generation, vision-language models.

PUBLICATIONS

- **FIFO-Diffusion: Generating Infinite Videos from Text without Training: NeurIPS 2024**
Jihwan Kim*, Junoh Kang*, Jinyoung Choi, Bohyung Han
- **Generating Animated Layouts as Structured Text Representations:** Under review
Yeonsang Shin*, Jihwan Kim*, Yumin Song, Kyungseung Lee, Hyunhee Chung, Taeyoung Na

EXPERIENCE

- **Undergraduate Researcher** *Jan. 2023 - Aug. 2024*
CVLAB, SNU
Conducted research on long video generation and novel view synthesis using diffusion models.
First-author of the NeurIPS paper, FIFO-Diffusion, advised by Prof. Bohyung Han.
- **SKT AI Fellowship** *May. 2024 - Nov. 2024*
Work with GST Media Gen AI team.
Dynamic layout generation for video Advertisements. Text-based video representation.
Co-first author of a paper on text-based video generation (under review).
- **Research Grant from fal.ai** *Jun. 2023 - Aug. 2023*
Two open-source AI projects
Unofficial implementation of SV3D training, Motion-LoRA for SVD.
- **AI Research Engineer, Dalpha Inc.** *Jun. 2023 - Aug. 2023*
AI research projects
Virtual try-on, Short-form video generation, Diffusion-based avatar generation, Crowd facial emotion recognition.
- **Talent Internship Program, Samsung Electronics Co., Ltd.** *Jul. 2020 - Aug. 2020*
Analog Design Team, System LSI.

PROJECTS

- **3D Vision Project:** Novel view refinement via attention fusion
- **Open-source Contributions:** Developed unofficial implementations for SV3D training and Motion-LoRA for SVD
SV3D-fine-tune Github (100+ stars!) Motion-LoRA Github (40+ stars!)
- **AR via Stereo Vision:** Augmented Reality implemented by traditional computer vision methodologies (code)

HONORS AND AWARDS

- **Gold Award (1st prize in Signal Processing)**, 31th Samsung Humantech Paper Award - Jan. 2025
Awarded \$15,000.
- Graduated **Summa Cum Laude**, Seoul National University - Aug. 2024
Graduated Summa Cum Laude from SNU
- **1st Place**, SK Telecom AI fellowship - Nov. 2024
Won first place among 16 teams in the fellowship research competition; awarded \$2,500.
- **Specialized Semiconductor Program Scholarship**, Grade A - Sep. 2023
Received a 10000\$ grant from the SNU Specialized Semiconductor Program