Jiwoo Chung

jiwoo.jg@gmail.com jiwoogit.github.io jiwoo-chung-944182289 jiwoogit

Research Interests

Computer Vision, Generative Models (GANs, Diffusion, Autoregressive): Image & Video Editing, Generative Model Compression; current focus on **Video Diffusion Acceleration** and Diffusion-based Image Editing.

Education

Sungkyunkwan University (SKKU) *2024 – present*
Ph.D. in Artificial Intelligence

Sungkyunkwan University (SKKU) *2022 – 2024*
M.S. in Artificial Intelligence
Thesis: *Diversity-aware Channel Pruning for StyleGAN Compression*
GPA: 4.2/4.5

Sungkyunkwan University (SKKU) *2016 – 2022*
B.S. in Computer Science and Engineering
GPA: 4.05/4.5 (C.S.: 4.26/4.5); Honors: *SKKU Magna Cum Laude*

Experience

Research Intern *May 2025 – Sep 2025*
NAVER Cloud, Video Team (Advisor: Yongjun Hong)

- Conducted research on **video diffusion acceleration**; experiments on large-scale GPU clusters.

Graduate Researcher *2021 – present*
Visual Computing Lab, SKKU (Advisor: Jae-Pil Heo)

- Ongoing research on generative models.

Web Developer *2018 – 2020*
Inswave Systems Co., Ltd.

- Developed *WebSquare*, an HTML5-based UI/UX solution.
- Served as Industrial Technical Personnel for military service.

Publications

Fine-Tuning Visual Autoregressive Models for Subject-Driven Generation ICCV 2025
Jiwoo Chung, Sangeek Hyun, Hyunjun Kim, Eunseo Koh, MinKyu Lee, Jae-Pil Heo
[arXiv] [Code] [Project]

Diffusion Feature Field for Text-based 3D Editing with Gaussian Splatting NeurIPS 2025
Eunseo Koh, Sangeek Hyun, MinKyu Lee, Jiwoo Chung, Kangmin Seo, Jae-Pil Heo

Style Injection in Diffusion: A Training-free Approach for Adapting Large-Scale Diffusion Models for Style Transfer CVPR 2024
Highlight (Top 10%)
Jiwoo Chung*, Sangeek Hyun*, Jae-Pil Heo
[arXiv] [Code] [Project]

Diversity-aware Channel Pruning for StyleGAN Compression CVPR 2024
Jiwoo Chung, Sangeek Hyun, Sang-Heon Shim, Jae-Pil Heo
[arXiv] [Code] [Project]

Towards Squeezing-averse Virtual Try-on via Sequential Deformation AAAI 2024
Sang-Heon Shim, Jiwoo Chung, Jae-Pil Heo
[arXiv] [Code]

Frequency-based Motion Representation for Video Generative Adversarial Networks TIP 2023
Sangeek Hyun, Jaihyun Lew, Jiwoo Chung, Euiyeon Kim, Jae-Pil Heo
[Code]

Semantic Consistency for Optimization-based GAN Inversion KSC 2021
Jiwoo Chung, Jae-Pil Heo
Best Paper Award in Undergraduate/Junior Paper Competition

Research Projects

A Testbed for Deep Learning-based Dynamic Spatial Video Generation *2024 – 2025*
- Supported by Electronics and Telecommunications Research Institute (ETRI); Role: **Project Co-leader**
- Developed real-time 3D Gaussian splatting [PPT] [Video]

Detection of AI-based Fake Investigation and Tip Videos *2022 – 2024*
- Supported by Korean National Police Agency
- Developed research for object (person) insertion manipulation scenario
- Developed interactive web demo [Manual] [Video]

Foot Pressure-based Human Pose Estimation for Diabetic Foot Detection *2021*
- In collaboration with Hippo T&C Inc.; Role: **Project Leader**
- Collected foot pressure and video data [Examples]
- Developed a pose estimation pipeline using a transformer-based model architecture

5G-based Cultural Project Communication Platform *2020 – 2022*
- Supported by Electronics and Telecommunications Research Institute (ETRI)
- Developed **video generation** using conditional GANs with virtual try-on image inputs

Awards and Honors

- **Qualcomm Innovation Fellowship Korea 2025**, Finalist
- **AI Graduate Excellence Scholarship** (Ph.D.), 2024–present
- **AI Graduate Excellence Scholarship** (M.S.), 2022–2023 (~~₩~~12M total)
- **Sungkyun Software Scholarships**, (Full tuition, ~~₩~~30M total)

Academic Service

- Reviewer: IEEE TPAMI 2025; NeurIPS 2025; AAAI 2026, CVPR 2026

Skills

Programming Languages: Python, JavaScript, C/C++
Frameworks/Tools: PyTorch, Git, Docker
Editors/Shell: VSCode, Vim, Zsh