Juil Koo

3rd-year Ph.D Student KAIST School of Computing

Rm 622, N1 Bldg, 291, Daehak-ro, Yuseong-gu, Daejeon, Republic of Korea 63days@kaist.ac.kr https://63days.github.io/

RESEARCH INTERESTS

Generative Models, 3D Machine Learning, Vision and Language Multi-Modality

EDUCATION

Feb. 2023~ KAIST, Daejeon, Korea

Present Ph.D in Computer Science
Advisor: Minhyuk Sung

Mar. 2021~ KAIST, Daejeon, Korea

Feb. 2023 M.S. in Computer Science
Advisor: Minhyuk Sung

Mar. 2017~ Kyungpook National University, Daegu, Korea

Feb. 2021 B.S. in Electronics Engineering
GPA: 4.26 / 4.3 (ranked 1st out of 349)

EMPLOYMENT

Jul. 2024 ~ Adobe Research, London, United Kingdom

Sep. 2024 Research Intern

Mentors: Paul Guerrero, Duygu Ceylan and Chun-Hao Huang

PUBLICATIONS

- [1] <u>VideoHandles: Editing 3D Object Compositions in Videos Using Video Generative Priors</u> **Juil Koo**, Paul Guerrero, Chun-Hao Huang, Duygu Ceylan, Minhyuk Sung *CVPR 2025*
- [2] <u>SyncTweedies: A General Generative Framework Based on Synchronized Diffusions</u>
 Jaihoon Kim*, **Juil Koo***, Kyeongmin Yeo*, Minhyuk Sung (* equal contribution.)

 NeurIPS 2024
- [3] <u>Neural Pose Representation Learning for Generating and Transferring Non-Rigid Object</u>
 <u>Poses</u>

Seungwoo Yoo, **Juil Koo**, Kyeongmin Yeo, Minhyuk Sung *NeurIPS 2024*

[4] <u>Posterior Distillation Sampling</u> **Juil Koo**, Chanho Park, Minhyuk Sung

CVPR 2024

- [5] <u>SALAD: Part-Level Latent Diffusion for 3D Shape Generation and Manipulation</u> **Juil Koo***, Seungwoo Yoo*, Minh Hieu Nguyen*, Minhyuk Sung (* equal contribution.) *ICCV 2023*
- [6] PartGlot: Learning Shape Part Segmentation from Language Reference Games

 Juil Koo, Ian Huang, Panos Achiloptas, Leonidas Guibas, Minhyuk Sung

 CVPR 2022, Accepted as Oral Presentation (Acceptance rate<4.2%)

AWARDS AND HONORS

Machine Learning for 3D Data

AWARDS AND HONORS	
Outstanding TA Award	Feb. 2025
KAIST, Korea Best Paper Award Samsung Electronics-KAIST R&D Exchange Meeting, Korea	Aug. 2024
Outstanding TA Award KAIST, Korea	Feb. 2023
Outstanding Master's Thesis Award KAIST, Korea	Nov. 2022
Qualcomm Innovation Fellowship Korea 2022 Qualcomm, Korea	Nov. 2022
Outstanding Paper Award Korea Computer Graphics Society, Korea	Jul, 2022
Outstanding TA Award KAIST, Korea	Feb. 2022
Kwanjeong Scholarship Kwanjeong Educational Foundation, Korea	Mar. 2019
National & Technology Scholarship Korea Student Aid Foundation, Korea	Mar. 2017
PRESENTATION	
3DMV, M3DS, AI4CC, AI3DG, CVEU, and GCV Workshops at CVPR 2024	Jun. 2024
AI3DCC and L3DS Workshops at ICCV 2023	Sep. 2023
L3DS Workshop at ECCV 2022	Oct. 2022
TEACHING	
Teaching Assistant	
Diffusion Models and Their Applications KAIST CS492-D	Fall 2024

Fall 2023

KAIST CS479

Introduction to Computer Graphics Spring 2023

KAIST CS380

Geometric Modeling and Processing Fall 2022

KAIST CS492-J

Machine Learning for 3D Data Spring 2022

KAIST CS492-A

Geometric Modeling and Processing Fall 2021

KAIST CS492-H

ACADEMIC SERVICE

CVPR Reviewer

- ICCV Reviewer
- ECCV Reviewer
- SIGGRAPH Reviewer
- AAAI Reviewer
- Eurographics Reviewer
- GCV@CVPR2024 Workshop Reviewer
- AI4VA@ECCV2024 Workshop Reviewer
- OOD-CV@ECCV2024 Workshop Reviewer