

## INTRO.

I am a PhD student at KAIST, advised by Prof. Seungryong Kim. My research focuses on leveraging large-scale generative priors to model worlds, humans, and their complex interactions.

I have worked with image and video diffusion models, applying them to 3D object and scene generation, as well as realistic human video generation. Currently, I am focusing on extending these methods to model complex human-human and human-world interactions, exploring how generative priors can capture interaction dynamics.

## INTERNSHIPS

Meta   Research Scientist Intern	Mar. 2025 - Sep. 2025
<ul style="list-style-type: none"> <li>• Project: Arbitrary-Length Human Video Synthesis with Large-Scale DiTs.</li> </ul>	
Sony AI   Research Scientist Intern	Dec. 2023 - May. 2024
<ul style="list-style-type: none"> <li>• Project: Scene-Level Novel View Generative Models with Sparse Geometry.</li> </ul>	

## COLLAB.

NAVER   Research Residency	Oct. 2025 - Feb. 2026
<ul style="list-style-type: none"> <li>• Project: 3D Generation with Multimodal Large Language Models</li> </ul>	
Sony AI   Research Collaborator	May. 2024 - Feb. 2025
<ul style="list-style-type: none"> <li>• Project: Video Generative Models for Camera Trajectory Editing</li> </ul>	
Queen Mary University of London   Visiting Scholar	May. 2023 - Aug. 2023
<ul style="list-style-type: none"> <li>• Project: Leveraging Diffusion Generative Priors for Robot Manipulation. Collaborated with Dr. Changjae Oh.</li> </ul>	

## PUBLICATIONS

1. Junyoung Seo, Rodrigo Mira, Alexandros Haliassos, Stella Bounareli, Honglie Chen, Linh Tran, Seungryong Kim, Zoe Landgraf, Jie Shen, “Lookahead Anchoring: Preserving Character Identity in Audio-Driven Human Animation”,  
Work done during internship at Meta.  
*(Under Review) ArXiv*, 2025. [Link]
2. Junyoung Seo\*, Jisang Han\*, Jaewoo Jung\*, Siyoon Jin, Joungbin Lee, Takuya Narihira, Kazumi Fukuda, Takashi Shibuya, Donghoon Ahn, Shoukang Hu, Seungryong Kim, Yuki Mitsufuji, “Vid-CamEdit: Video Camera Trajectory Editing with Generative Rendering from Estimated Geometry”,  
*AAAI Conference on Artificial Intelligence (AAAI)*, 2026. [Link]
3. Jisang Han, Honggyu An, Jaewoo Jung, Takuya Narihira, Junyoung Seo, Kazumi Fukuda, Chae-hyun Kim, Sungewan Hong, Seungryong Kim, Yuki Mitsufuji, “D2USt3R: Enhancing 3D Reconstruction with 4D Pointmaps for Dynamic Scenes”,  
*Neural Information Processing Systems (NeurIPS)*, 2025. [Link]
4. Kihong Kim\*, Yunho Kim\*, Seokju Cho, Junyoung Seo, Jisu Nam, Kychul Lee, Seungryong Kim, Kwang Hee Lee, “DiffFace: Diffusion-based Face Swapping with Facial Guidance”,  
*Pattern Recognition (PR)*, 2025. [Link]
5. Junyoung Seo, Kazumi Fukuda, Takashi Shibuya, Takuya Narihira, Naoki Murata, Shoukang Hu, Chieh-Hsin Lai, Seungryong Kim, Yuki Mitsufuji, “GenWarp: Single Image to Novel Views with Semantic-Preserving Generative Warping”,  
Work done during internship at Sony AI.  
*Neural Information Processing Systems (NeurIPS)*, 2024. [Link]
6. Junyoung Seo, Susung Hong, Wooseok Jang, Min-Seop Kwak, Hyeonsu Kim, Doyup Lee, Seungryong Kim, “Retrieval-augmented Score Distillation for Text-to-3D Generation”,  
*International Conference on Machine Learning (ICML)*, 2024. [Link]
7. Junyoung Seo\*, Wooseok Jang\*, Min-Seop Kwak\*, Jaehoon Ko, Hyeonsu Kim, Junho Kim, Jin-Hwa Kim, Jiyoung Lee, Seungryong Kim, “Let 2D Diffusion Model Know 3D-Consistency for Robust Text-to-3D Generation”,  
*International Conference on Learning Representations (ICLR)*, 2024. [Link]
8. Gyeongnyeon Kim\*, Wooseok Jang\*, Gyuseong Lee\*, Susung Hong, Junyoung Seo, Seungryong Kim, “DAG: Depth-Aware Guidance with Denoising Diffusion Probabilistic Models”,  
*Pattern Recognition (PR)*, 2024.

9. Junyoung Seo\*, Gyuseong Lee\*, Seokju Cho, Jiyoung Lee, Seungryong Kim, “MIDMs: Matching Interleaved Diffusion Models for Exemplar-based Image Translation”,  
*AAAI Conference on Artificial Intelligence (AAAI)*, 2023. [Link]
  10. Jiwon Kim\*, Yeongjo Min\*, Daehwan Kim\*, Gyuseong Lee, Junyoung Seo, Kwangrok Ryoo, Seungryong Kim, “ConMatch: Semi-Supervised Learning with Confidence-Guided Consistency Regularization”,  
*European Conference on Computer Vision (ECCV)*, 2022.
  11. Jiwon Kim\*, Kwangrok Ryoo\*, Junyoung Seo\*, Gyuseong Lee\*, Daehwan Kim, Hansang Cho, Seungryong Kim, “Semi-Supervised Learning of Semantic Correspondence with Pseudo-Labels”,  
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022.

EDUCATION

<b>Korea Advanced Institute of Science and Technology (KAIST)</b>	Seoul, Korea
<i>Integrated M.S./Ph.D. in Artificial Intelligence</i>	2024 - 2027 (expected)
<b>Korea University</b>	Seoul, Korea
<i>Integrated M.S./Ph.D. in Computer Science and Engineering</i>	2022 - 2024
• Transferred to KAIST with supervisor (degree incomplete).	
<b>Korea University</b>	Seoul, Korea
<i>B.S. in Electrical Engineering</i>	2016 - 2022

ETC.

**Academic Service (Reviewer):** NeurIPS, ICLR, ICML, CVPR, ICCV, ECCV, AAAI, TPAMI, and WACV.

**Military obligation:** Republic of Korea Air Force, Feb. 2018 - Jan. 2020.