

Hyunyoung Jung

Personal website | email | linkedin | google scholar

Expertise: 3D computer vision, generative modeling (diffusion/flow matching), visual perception, neural rendering.

Experience

Meta Reality Labs

Senior Software Engineer | Burlingame, CA Nov 2024 – Present

Research and develop 3D generative models for AssetGen and WorldGen.

Research Collaborator (Contract) | Seoul, South Korea Jan 2024 – Jun 2024

Research Scientist Intern | Sunnyvale, CA Jun 2023 – Dec 2023

Research Scientist Intern | Seattle, WA Jun 2022 – Dec 2022

Education

Seoul National University Sep 2019 – Aug 2024

Ph.D. in Computer Science and Engineering

Advisor: Prof. Sungjoo Yoo

Seoul National University Mar 2013 – Aug 2019

B.S. in Computer Science and Engineering

Publications

AssetGen: Deployable 3D Asset Generation at Interactive Speed

Dilin Wang, Xiaoyu Xiang, Kihyuk Sohn, Tom Monnier, Yu-Ying Yeh, Thu Nguyen-Phuoc, Jiawen Zhang, Yuchen Fan, Antoine Toisoul, **Hyunyoung Jung**, Prithviraj Dhar, Michael Bunnell, Nikolaos Sarafianos, Chuhang Zou, Roman Shapovalov, Andrea Vedaldi, Rakesh Ranjan

arXiv, 2026.

WorldGen: From Text to Traversable and Interactive 3D Worlds

Dilin Wang, **Hyunyoung Jung**, Tom Monnier, Kihyuk Sohn, Chuhang Zou, Xiaoyu Xiang, Yu-Ying Yeh, Di Liu, Zixuan Huang, Thu Nguyen-Phuoc, Yuchen Fan, Sergiu Oprea, Ziyang Wang, Roman Shapovalov, Nikolaos Sarafianos, Thibault Groueix, Antoine Toisoul, Prithviraj Dhar, Xiao Chu, Minghao Chen, Geon Yeong Park, Mahima Gupta, Yassir Azziz, Rakesh Ranjan, Andrea Vedaldi

CVPR, 2026.

AutoPartGen: Autoregressive 3D Part Generation and Discovery

Minghao Chen, Jianyuan Wang, Roman Shapovalov, Tom Monnier, **Hyunyoung Jung**, Dilin Wang, Rakesh Ranjan, Iro Laina, Andrea Vedaldi

NeurIPS, 2025.

Geometry Transfer for Stylizing Radiance Fields

Hyunyoung Jung, Seonghyeon Nam, Nikolaos Sarafianos, Sungjoo Yoo, Alexander Sorkine-Hornung, Rakesh Ranjan

CVPR, 2024.

AnyFlow: Arbitrary Scale Optical Flow with Implicit Neural Representation

Hyunyoung Jung, Zhuo Hui, Lei Luo, Haitao Yang, Feng Liu, Sungjoo Yoo, Rakesh Ranjan, Denis Demandolx

CVPR, 2023. *Highlight.*

Fine-grained Semantics-aware Representation Enhancement for Self-supervised Monocular Depth Estimation

Hyunyoung Jung, Eunhyuk Park, Sungjoo Yoo

ICCV, 2021. *Oral presentation.*

Honors and Awards

SNU CSE Ph.D. Dissertation Award	2024
SNU BK21 Star Student Researcher Award	2022
Qualcomm Innovation Fellowship Korea	2021
2nd Place, NAVER LABS Mapping & Localization Challenge	2020

Invited Talks

Samsung Advanced Institute of Technology (SAIT)	Jun 2023
<i>AnyFlow: Arbitrary Scale Optical Flow with Implicit Neural Representation</i>	
Meta Reality Labs	Sep 2021
<i>Fine-grained Semantics-aware Representation Enhancement for Self-supervised Monocular Depth Estimation</i>	
NAVER LABS	Sep 2021
<i>Fine-grained Semantics-aware Representation Enhancement for Self-supervised Monocular Depth Estimation</i>	
NAVER AI LAB	Aug 2021
<i>Introduction to Self-supervised Depth Estimation</i>	
Samsung Advanced Institute of Technology (SAIT)	Jul 2021
<i>Visual Localization Case Study and Self-supervised Monocular Depth Estimation</i>	

Academic Service

Conference reviewer: CVPR, ECCV, ICCV, NeurIPS.

Journal reviewer: IEEE Transactions on Image Processing (TIP), IEEE Robotics and Automation Letters (RA-L), IEEE Access, IEEE Sensors.