

CONTACT INFORMATION	DGIST (Daegu Gyeongbuk Institute of Science and Technology), Dept. Electrical Engineering and Computer Science (EECS), E3-319, Techno jungang-daero 333, Hyeonpung-eup, Dalseong-gun, Daegu, Republic of Korea, 42988	Tel.: +82-10-2997-2903 E-mail: smu06117@dgist.ac.kr Google scholar: user=7zAhXNIAAAAJ Homepage: https://wonhyeok-choi.github.io
RESEARCH INTERESTS	Computer Vision (Scene Understanding, 3D perception tasks) Deep Learning (Multi-task Learning, Optimization, Metric Learning) Physical AI (Reinforcement Learning, Diffusion Policy)	
EDUCATION	M.S. - Ph.D. <i>Integrated Course</i> , Electrical Engineering & Computer Sciences (EECS), DGIST , South Korea	Mar. 2022 – present <i>Advisor: Prof. Sunghoon Im</i>
	<i>Visiting Scholar</i> , Psychiatry & Behavioral Sciences, Stanford University , United States of America	Sep. 2024 – Dec. 2024 <i>Advisor: Prof. Kilian M. Pohl</i>
	<i>Bachelor</i> , Convergence Science, DGIST , South Korea	Mar. 2018 – Feb. 2022
	<i>Exchange Student</i> , UC Berkeley , United States of America	Jun. 2018 – Aug. 2018
	Hansung Science High School , South Korea	Mar. 2015 – Feb. 2018
PUBLICATIONS	Kyumin Hwang*, Wonhyeok Choi* , Kiljoon Han, Wonjoon Choi, Minwoo Choi, Yongcheon Na, Minwoo Park, Sunghoon Im. "Scale-invariant and View-relational Representation Learning for Full Surround Monocular Depth", (RA-L). Nov 2025.	
	Jihun Park*, Kyoungmin Lee*, Jongmin Gim*, Hyeonseo Jo, Minseok Oh, Wonhyeok Choi , Kyumin Hwang, Jaeyeul Kim, Minwoo Choi, Sunghoon Im. "Infinite-Story: A Training-Free Consistent Text-to-Image Generation", (AAAI), Nov 2025.	
	Wonhyeok Choi* , Kyumin Hwang*, Wei Peng, Minwoo Choi, Sunghoon Im. "Self-supervised Monocular Depth Estimation Robust to Reflective Surface Leveraged by Triplet Mining", International Conference on Learning Representations (ICLR), Apr 2025.	
	Wonhyeok Choi* , Kyumin Hwang*, Minwoo Choi, Kiljoon Han, Wonjoon Choi, Mingyu Shin, Sunghoon Im. "Intrinsic Image Decomposition for Robust Self-supervised Monocular Depth Estimation on Reflective Surfaces", The Association for the Advancement of Artificial Intelligence (AAAI), Feb 2025.	
	Wonhyeok Choi* , Mingyu Shin*, Hyukzae Lee, Jaehoon Cho, Jaehyeon Park, Sunghoon Im. "Multi-task Learning for Real-time Autonomous Driving leveraging Task-wise Attention Generator", IEEE International Conference on Robotics and Automation (ICRA), May 2024.	
	Wonhyeok Choi* , Mingyu Shin*, Sunghoon Im. "Depth-discriminative Metric Learning for Monocular 3D Object Detection", Neural Information Processing Systems (NeurIPS), Dec 2023.	
	Wonhyeok Choi , Sunghoon Im. "Dynamic Neural Network for Multi-Task Learning Searching across Diverse Network Topologies", IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), Jun 2023.	

Seunghun Lee, **Wonhyeok Choi**, Changjae Kim, Minwoo Choi, Sunghoon Im. “ADAS: A Direct Adaptation Strategy for Multi-Target Domain Adaptive Semantic Segmentation”, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), Jun 2022.

ACADEMIC ACTIVITIES

Awards

- Top Prize, 16th ICT Paper Competition and Grand Exhibition, Dec. 2024
— Electronic News
- 3rd Prize, 30th HumanTech Paper Award, Feb. 2024
— Samsung Electronics Co., Ltd.
- Outstanding Researcher Award, Dec. 2023
— Electronic Engineering & Computer Sciences, DGIST
- Excellence Prize, 15th ICT Paper Competition and Grand Exhibition, Dec. 2023
— Electronic News
- Kyu-Young Hwang Outstanding Research Award, Oct. 2023
— Electronic Engineering & Computer Sciences, DGIST
- Top Prize, Autonomous Driving AI Development Challenge, Oct. 2023
— Ministry of Land, Infrastructure and Transport
- Participation Prize, 28th HumanTech Paper Award, Feb. 2022
— Samsung Electronics Co., Ltd.

Teaching Experience

- Invited Speaker of Online Tutorial Session (100+ attendees), Aug. 2025
Provided a hands-on walkthrough of the Monocular Depth paper’s implementation.
— Korea Conference on Computer Vision (KCCV 2025)
- Teaching Assistant of AI Basics (100+ students), Aug. 2022 – Dec. 2022
— Daegu Gyeongbuk Institute of Science and Technology (DGIST)

Reviewer

- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2025
- International Conference on Learning Representations (ICLR) 2025
- International Conference on Machine Learning (ICML) 2025
- Association for the Advancement of Artificial Intelligence (AAAI) 2025
- IEEE Winter Conference on Applications of Computer Vision (WACV) 2025
- International Conference on Medical Image Computing & Computer-Assisted Intervention (MICCAI) 2025
- Neural Information Processing Systems (NeurIPS) 2024 – 2025
- IEEE Robotics and Automation Letters (RA-L) 2024 – 2025
- IEEE International Conference on Robotics and Automation (ICRA) 2024 – 2025
- IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2023 – 2025
- IEEE International Conference on Computer Vision (ICCV) 2023 – 2025
- The European Conference on Computer Vision (ECCV) 2024

PATENTS

Registration

- METHOD FOR MONOCULAR DEPTH ESTIMATION,
Publication date: Dec. 27, 2024 (10-2024-0098600)
- METHOD FOR MONOCULAR DEPTH ESTIMATION ON REFLECTIVE SURFACE,
Publication date: Jul. 25, 2024 (10-2024-0098600)
- METHOD FOR MOBILITY DEVICES LEVERAGING ARTIFICIAL INTELLIGENCE-BASED
MULTI-TASK PROCESSING,
Publication date: Mar. 25, 2024 (10-2024-0040179)
- METHOD FOR ESTIMATING DEPTH FROM MONOCULAR CAMERA IMAGES,
Publication date: Jul. 26, 2023 (10-2023-0087465)
- METHOD AND APPARATUS FOR MULTI-TASK LEARNING,
Publication date: Feb. 17, 2023 (10-2023-0021790)
- METHOD AND APPARATUS FOR DOMAIN ADAPTATION,
Publication date: Jul. 14, 2022 (10-2022-0087222)
- METHOD AND APPARATUS FOR DOMAIN ADAPTATION,
Publication date: Jul. 13, 2022 (10-2022-0086614)

SKILLS

Languages: Python, C, C++, C#

Theory: Type theory, Operation systems, Data structures, and Computer algorithms.

Development: Pytorch, HTML, CSS