

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 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	<p><i>M.S. - Ph.D. Integrated Course</i>, Electrical Engineering & Computer Sciences (EECS), DGIST, South Korea</p> <p><i>Visiting Scholar</i>, Psychiatry & Behavioral Sciences, Stanford University, United States of America</p> <p><i>Bachelor</i>, Convergence Science, DGIST, South Korea</p> <p><i>Exchange Student</i>, UC Berkeley, United States of America</p> <p>Hansung Science High School, South Korea</p>	<p><i>Mar. 2022 – present</i> Advisor: Prof. Sunghoon Im</p> <p><i>Sep. 2024 – Dec. 2024</i> Advisor: Prof. Kilian M. Pohl</p> <p><i>Mar. 2018 – Feb. 2022</i></p> <p><i>Jun. 2018 – Aug. 2018</i></p> <p><i>Mar. 2015 – Feb. 2018</i></p>
PUBLICATIONS	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Wonhyeok Choi*, Mingyu Shin*, Sunghoon Im. “Depth-discriminative Metric Learning for Monocular 3D Object Detection”, Neural Information Processing Systems (NeurIPS), Dec 2023.</p> <p>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.</p>	

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

Teaching Experience

- Invited Speaker of Online Tutorial Session (100+ attendees),
Provided a hands-on walkthrough of the Monocular Depth paper's implementation. Aug. 2025
— 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