

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: <a href="mailto:smu06117@dgist.ac.kr">smu06117@dgist.ac.kr</a> Google scholar: <a href="https://scholar.google.com/citations?user=7zAhXNIAAAAJ">user=7zAhXNIAAAAJ</a> Homepage: <a href="https://wonhyeok-choi.github.io">https://wonhyeok-choi.github.io</a>
RESEARCH INTERESTS	<b>Computer Vision</b> (Scene Understanding, 3D perception tasks) <b>Deep Learning</b> (Multi-task Learning, Optimization, Metric Learning) <b>Physical AI</b> (Reinforcement Learning, Diffusion Policy)	
EDUCATION	M.S. - Ph.D. Integrated Course, Electrical Engineering & Computer Sciences (EECS), DGIST, South Korea	Mar. 2022 – present Advisor: Prof. Sunghoon Im
	Visiting Scholar, Psychiatry & Behavioral Sciences, Stanford University, United States of America	Sep. 2024 – Dec. 2024 Advisor: Prof. Kilian M. Pohl
	Bachelor, Convergence Science, DGIST, South Korea	Mar. 2018 – Feb. 2022
	Exchange Student, UC Berkeley, United States of America	Jun. 2018 – Aug. 2018
	Hansung Science High School, South Korea	Mar. 2015 – Feb. 2018
PUBLICATIONS	<b>Wonhyeok Choi</b> , Kyumin Hwang, Jihun Park, Kyoungmin Lee, Seunghun Lee, Jaeyeul Kim, Minwoo Choi, Sunghoon Im. "TaskForce: Cooperative Multi-agent Reinforcement Learning for Multi-task Optimization", IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), Jun 2026.  Kyoungmin Lee, Jihun Park, Jongmin Gim, <b>Wonhyeok Choi</b> , Kyumin Hwang, Jaeyeul Kim, Sunghoon Im. "A Training-Free Style-Personalization via SVD-Based Feature Decomposition", IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), Jun 2026.  Kyumin Hwang*, <b>Wonhyeok Choi*</b> , 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, transferred to ICRA 2026). Jun 2026.  Jihun Park*, Kyoungmin Lee*, Jongmin Gim*, Hyeonseo Jo, Minseok Oh, <b>Wonhyeok Choi</b> , Kyumin Hwang, Jaeyeul Kim, Minwoo Choi, Sunghoon Im. "Infinite-Story: A Training-Free Consistent Text-to-Image Generation", (AAAI), Jan 2026.  <b>Wonhyeok Choi*</b> , 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.  <b>Wonhyeok Choi*</b> , 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.  <b>Wonhyeok Choi*</b> , 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.  <b>Wonhyeok Choi*</b> , 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 Specialized Seminar (50+ attendees), Dec. 2025  
*Faciliated a research-oriented presentation on self-supervised monocular depth estimation*  
— The 9th Daegu AI Researchers’ Forum (DARF 2025)
- 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 Conference on Computer Vision and Pattern Recognition (CVPR) 2023 – 2026
- IEEE International Conference on Computer Vision (ICCV) 2023 – 2025
- The European Conference on Computer Vision (ECCV) 2024 – 2026
- 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
- International Conference on Learning Representations (ICLR) 2025 – 2026
- International Conference on Machine Learning (ICML) 2025 – 2026
- Association for the Advancement of Artificial Intelligence (AAAI) 2025 – 2026
- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2025 – 2026
- IEEE Winter Conference on Applications of Computer Vision (WACV) 2025
- International Conference on Medical Image Computing & Computer-Assisted Intervention (MICCAI) 2025

## PATENTS

### Registration

- VIDEO-TEXT ALIGNMENT-BASED OBJECT SEGMENTATION METHOD AND DEVICE,  
Publication date: Aug. 18, 2025 (PCT/KR2025/012482)
- METHOD FOR GENERATING PERSONALIZED IMAGE IN A NON LEARNING STYLE  
USING A SCALE-BASED AUTOREGRESSIVE MODEL,  
Publication date: Jul. 23, 2025 (10-2025-0099672)
- INTRINSIC IMAGE DECOMPOSITION FOR ROBUST SELF-SUPERVISED MONOCULAR  
DEPTH ESTIMATION ON REFLECTIVE SURFACES,  
Publication date: Jul. 15, 2025 (PCT/KR2025/010319)
- DEPTH ESTIMATION METHOD FOR MONOCULAR CAMERA IMAGES,  
Publication date: Dec. 27, 2024 (10-2024-0197840)
- MONOCULAR DEPTH ESTIMATION METHOD FOR DEPTH ESTIMATION OF REFLEC-  
TIVE SURFACE,  
Publication date: Jul. 25, 2024 (10-2024-0098600)
- METHOD AND MOBILITY DEVICES FOR MULTI-TASK PROCESSING BASED ON MULTI-  
TASK ARTIFICIAL INTELLIGENCE,  
Publication date: Mar. 25, 2024 (10-2024-0040179)
- DEPTH ESTIMATION METHOD FOR MONOCULAR CAMERA IMAGE,  
Publication date: Jul. 06, 2023 (10-2023-0087465)
- COMPUTER PROGRAM AND METHOD FOR MULTI TASK LEARNING,  
Publication date: Feb. 17, 2023 (10-2023-0021790)
- METHOD AND COMPUTER PROGRAM FOR DOMAIN ADAPTATION,  
Publication date: Jul. 14, 2022 (10-2022-0087222)
- METHOD AND COMPUTER PROGRAM 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