Wonhyeok Choi Researcher of Computer Vision & Deep learning

CONTACT DGIST (Daegu Gveongbuk Institute of Science and Technology)

INFORMATION Dept. Electrical Engineering and Computer Science (EECS) Tel.: +82-10-2997-2903

E3-319, Techno jungang-daero 333, Hyeonpung-eup, E-mail: smu06117@dgist.ac.kr Dalseong-gun, Daegu, Republic of Korea, 42988 h.p.: https://wonhyeok-choi.github.io/

Research Computer Vision (3D perception tasks, Scene Understanding)

INTERESTS Deep Learning (Multi-task Learning, Meta Learning, Dynamic Neural Networks)

Applications - Autonomous driving, AR/VR

EDUCATION M.S. - Ph.D. Integrated Course in Electrical Engineering Mar. 2022 –

& Computer Sciences (EECS), DGIST, South Korea Advisor: Prof. Sunghoon Im

Bachelor of Convergence Science, DGIST, South Korea Mar. 2018 – Feb. 2022

Publications 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

 $International\ Conference\ on\ Robotics\ and\ Automation\ (ICRA),\ Jan\ 2024.$

 $\textbf{Wonhyeok Choi*}, \textbf{Mingyu Shin*}, \textbf{Sunghoon Im}. \quad \text{``Depth-discriminative Metric Learning for Monocular'}$

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	Reviewer		
Activities	• IEEE Conference on Computer Vision and Pattern Recognition (CVPR)	2023 – 2024	
	IEEE International Conference on Computer Vision (ICCV)	2023	
	The European Conference on Computer Vision (ECCV)	2024	
	• IEEE International Conference on Robotics and Automation (ICRA)	2024	
	Awards		
	• 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		
	 Grand 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.		
Skills	Languages: Python, C, C++, C#		
	Theory: Type theory, Operation systems, Data structures, and Computer algorithms.		
	Development: Pytorch, HTML, CSS		
Patents	Registration		
211121110	METHOD FOR ESTIMATING DEPTH FROM MONOCULAR CAMERA IMAGES,		

• 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)		