Gyeongrok Oh

Contact Information Gyeongrok Oh Seoul, Korea

*****Homepage

☑ dhrudfhr98@korea.ac.kr

Sep. 2022- Current

Research BACKGROUND

Computer Vision / Deep Learning

Generative Model: Multi-modal Representation Learning

Embodied AI: 3D Visual Perception, Vision-Language Navigation Machine Learning: Domain Adaptation, Test-time Adaptation

EDUCATION

Ph.D. in Artificial Intelligence, Korea University, GPA: 4.28/4.5

Advisor: Prof. Sangpil Kim

B.S. in Computer Science, Inha University, GPA: 4.0/4.5 Mar. 2016– Aug. 2022

Advisor: Prof. Jinman Jung

Research EXPERIENCE Samsung Advanced Institute of Technology (SAIT)

Jan. 2024– Feb. 2025

Visiting Researcher @ Computer Vision Lab Advisors: Ph.D. Sujin Jang

Projects: Autonomous Driving, Vision-Language Navigation

Korea University

Dec. 2021– Aug. 2022

Research Intern @ Computer Vision Lab

Advisors: Prof. Sangpil Kim

Projects: Generative Model, Multi-modal Fusion

Journal **Publications** (†Equal contribution)

[J3]. Gyeongrok Oh, Sungjune Kim, Heon Gu, Sang Ho Yoon, Jinkyu Kim, Sangpil Kim, "FPANet: Frequency-based Video Demoireing using Frame-level Post Alignment", Neural Networks, 2025, JCR 10%.

[J2]. Seunghyun Lee†, Hyung-gun Chi†, Gyeongrok Oh, Wonmin Byeon, Sang Ho Yoon, Hyunje Park, Wonjun Cho, Jinkyu Kim*, Sangpil Kim*, "Robust Sound-Guided Image Manipulation", Neural Networks, 2024, JCR 10%.

[J1]. Seung Hyun Leet, Sieun Kimt, Wonmin Byeon, Gyeongrok Oh, Sumin In, Hyeongcheol Park, Sang Ho Yoon, Sung-hee Hong, Jinkyu Kim*, and Sangpil Kim*, "Audio-Guided Implicit Neural Representation for Local Image Stylization", In Computational Visual Media, 2024, JCR 10%.

Conference Publications (†Equal contribution)

[C5]. Gyeongrok Oh[†], Sungjune Kim[†], Heeju Ko, Hyung-gun Chi, Jinkyu Kim, Dongwook Lee, Daehyun Ji, Sungjoon Choi, Sujin Jang*, Sangpil Kim* "3D Occupancy Prediction with Low-Resolution Queries via Prototype-aware View Transformation", In CVPR, 2025.

[C4]. Gyeongrok Oh, Jaehwan Jeong, Sieun Kim, Wonmin Byeon, Jinkyu Kim, Sungwoong Kim, Sangpil Kim, "MEVG: Multi-event Video Generation with Text-to-Video Models ", In *ECCV*, 2024.

[C3]. Gyusam Changt, Wonseok Roht, Sujin Jang, Dongwook Lee, Daehyun Ji, Gyeongrok Oh, Jinsun Park, Jinkyu Kim*, Sangpil Kim*, "CMDA: Cross-Modal and Domain Adversarial Adaptation for LiDAR-based 3D Object Detection", In **AAAI**, 2024.

[C2]. Wonseok Roh, Seung hyun Lee, Won Jeong Ryoo, Gyeongrok Oh, Jakyung Lee, Soo Yeon Hwang, Hyung-gun Chi, Sangpil Kim, "Functional Hand Type Prior for 3D Hand Pose Estimation and Action Recognition from Egocentric View Monocular Videos", In BMVC (Oral), 2023.

[C1]. Seung hyun Lee, Gyeongrok Oh, Wonmin Byeon, Chanyoung Kim, Won Jeong Ryoo, Sang Ho Yoon, Jihyun Bae, Jinkyu Kim*, Sangpil Kim*, "Sound-Guided Semantic Video Generation", In ECCV, 2022.

[P1]. Sungjune Kim†, Gyeongrok Oh†, Heeju Ko, Daehyun Ji, Dongwook Lee, Byung-Jun Lee, Sujin Jang*, Sangpil Kim* "Test-time Adaptation for Online Vision-Language Navigation with Feedback-based Reinforcement Learning", In *Submission*, 2025.

[P2]. MinHyuk Jang, Youngdong Jang, JaeHyeokLee, Feng Yang, Gyeongrok Oh, Jongheon Jeong, Sangpil Kim "LVMark: Robust Watermark for Latent Video Diffusion Models", In *Submission*, 2025.

SKILLS

Programming Languages: Python, C/C++

Tools: PyTorch, TensorFlow, JAX

TEACHING EXPERIENCE

Korea University, Seoul, Korea

• Teaching Assistant of Statistics (2023)

LG CNS, Seoul, Korea

• Teaching Assistant of Anomaly Detection Course for LG CNS Executives and Employees (2022, 2023)

Inha University, Incheon, Korea

• Teaching Assistant of Data Structure (2021)

Awards & Honors

BK 21 Academic Excellence Scholarship for freshmen

Inha AI challenge (Face Recognition)

• 1st Place, 2021

Departmental Scholarship, Dept of Computer Science, Inha University

• Mar.& Sep. 2020, Mar. 2021, Mar. 2022

ACADEMIC SERVICES Conference Reviewer.

- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024, 2025
- CVF/IEEE International Conference on Computer Vision (ICCV), 2025
- IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023

Program Committee.

• The Association for the Advancement of Artificial Intelligence (AAAI), 2025