Gyeongrok Oh

CONTACT INFORMATION	Gyeongrok Oh Seoul, Korea	⌂**Homepage** ✉ dhrudfhr98@korea.ac.kr

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   Sep. 2022– Current
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**)

[**P1**]. MinHyuk Jang, Youngdong Jang, JaeHyeokLee, Feng Yang, **Gyeongrok Oh**, Jongheon Jeong, Sangpil Kim "LVMark: Robust Watermark for Latent Video Diffusion Models", In ***Submission***, 2025.

[**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 Lee[†], Sieun Kim[†], 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**)

[**P1**]. **Gyeongrok Oh**, Youngdong Jang, Jonghyun Choi, Suk-Ju Kang, Guang Lin, Sangpil Kim, "ICP-4D: Bridging Iterative Closest Point and LiDAR Panoptic Segmentation ", In ***Submission***, 2026.

[**C7**]. Heeju Ko, Sungjune Kim, **Gyeongrok Oh**, Jeongyoon Yoon, Honglak Lee, Sujin Jang, Seungryong Kim, Sangpil Kim "Active Test-time Vision-Language Navigations", In ***NeurIPS***, 2025.

[**C6**]. 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 ***ICML***, 2025.

[**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, Sung-woong Kim, Sangpil Kim, "MEVG: Multi-event Video Generation with Text-to-Video Models ", In ***ECCV***, 2024.

[C3]. Gyusam Chang[†], Wonseok Roh[†], 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.

SKILLS

Programming Languages: Python, C/C++

Tools: PyTorch, TensorFlow, JAX

TEACHING EXPERIENCE

Korea University, Seoul, Korea
- Teaching Assistant of Statistics (2023)
- Teaching Assistant of Computer Vision (2025)

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, 2026
- CVF/IEEE International Conference on Computer Vision (ICCV), 2025
- IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023, 2025, 2026

Program Committee.
- The Association for the Advancement of Artificial Intelligence (AAAI), 2025, 2026