

C129, The 3rd Engineering Building, 50, Yonsei-ro, Seodaemun-gu, Seoul, Rep. of KOREA

□ (+82) 10-8238-0615 | ☑ jr000192@yonsei.ac.kr | ★ https://jinhyunj.github.io

Summary

Research Interest Deep learning, Computer vision, Vision-language models, Video understanding, Generative models

Current Focus Open-vocabulary object detection, Visual grounding

Education

Yonsei University

Seoul, S.Korea

JOINT M.S & PH.D CANDIDATE, ELECTRICAL & ELECTRONIC ENGINEERING

Mar. 2020 - Present

• Supervisor: Prof. Kwanghoon Sohn.

Yonsei University

Seoul, S.Korea

B.S., ELECTRICAL & ELECTRONIC ENGINEERING

Feb. 2020

Publication

"Descriptive Image-Text Matching with Graded Contextual Similarity"

JINHYUN JANG, JIYOUNG LEE, AND KWANGHOON SOHN

· Transactions on Multimedia, submitted

"Improving Visual Recognition with Hyperbolical Visual Hierarchy Mapping"

HYEOUNGJUN KWON, **JINHYUN JANG**, JIN KIM, KWONYOUNG KIM AND KWANGHOON SOHN

Jun 2024

• IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

"Knowing Where to Focus: Event-aware Transformer for Video Grounding"

JINHYUN JANG, JUNGIN PARK, JIN KIM, HYEOUNGJUN KWON AND KWANGHOON SOHN

Oct. 2023

• IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

"Probabilistic Prompt Learning for Dense Prediction"

HYEOUNGJUN KWON, TAEYONG SONG, SOMI JEONG, JIN KIM, JINHYUN JANG, AND KWANGHOON SOHN

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

"Semantic-Aware Network for Aerial-to-Ground Image Synthesis"

JINHYUN JANG, TAEYONG SONG AND KWANGHOON SOHN

Sep. 2021

• International Conference on Image Processing (ICIP), 2021.

Research Project _____

Development of Complex Situational Awareness and Prediction Technology through Multi-modal Data Fusion and Social Artificial Intelligence

Seoul, S.Korea

FUNDED BY MINISTRY OF SCIENCE, MID-LEVEL RESEARCH

Mar 2023 - Present

• Developed an algorithm for computer vision with multi-modal data.

Development of Object Detection and Tracking via Deep Learning

Seoul, S.Korea

FUNDED BY LIG NEX1

Apr. 2021 - Jun. 2022

· Developed an algorithm for object detection and tracking

Deep Identification and Tracking of Missing Person in Heterogeneous CCTV

Seoul, S.Korea

FUNDED BY MINISTRY OF SCIENCE, NATIONAL RESEARCH FOUNDATION

Jan. 2021 - Dec. 2022

• Developed an algorithm for pedestrian detection, anomaly detection

Seoul, S.Korea

Development of the Object Detection in Satellite Imaging

Jun. 2020 - Jan. 2021

FUNDED BY HANWHA SYSTEMS

• Developed an algorithm for object detection in Satellite Imaging

Patent

"Video Grounding Apparatus and Method"

JINHYUN JANG AND KWANGHOON SOHN

Mar. 2024

Korean patent, 10-2024-0050684

"Cross-modal Retrieval Learning Apparatus and Method"

JINHYUN JANG AND KWANGHOON SOHN

Apr. 2023

Korean patent, 10-2023-0047216

"Aerial-to-Ground Image Synthesis Apparatus and Method"

JINHYUN JANG AND KWANGHOON SOHN

Dec. 2021

• Korean patent, 10-2021-0166722

Honors & Awards.

2020 **3rd Award**, DACON Deepfake Face Detection Challenge

Seoul, S.Korea

Experiences _____

Lab Manager Seoul, S.Korea

DIGITAL IMAGE MEDIA LAB Sep. 2023 - Aug. 2024

Teaching Assistants Seoul, S.Korea

Dept. of Electrical & Electronic Engineering, Yonsei University

- Internship: Text-to-Image Generation, Spring, 2022
- Internship: Generative Models, Winter, 2021
- Signals and Systems, Fall, 2021
- Introductory Digital Experiments, Fall, 2020

Skills_____

Programming Python, Lua, C/C++, MATLAB

Deep learning Pytorch, Tensorflow **Languages** Korean, English