Jinhyun **Jang**

JOINT M.S & PH.D CANDIDATE · YONSEI UNIVERSITY

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, Object detection, 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

"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   *Jun. 2023*

- 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.

Patent

"Video Grounding Apparatus and Method"

JINHYUN JANG AND KWANGHOON SOHN   *Mar. 2024*

- Korean patent,

"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

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   *Jan. 2024 - Present*

- Developed an algorithm for video grounding

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   *Mar. 2020 - Feb. 2022*
- Developed an algorithm for pedestrian detection, tracking, re-identification

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-Present*

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