Jaehwan Jeong ► Email | Google Scholar | LinkedIn | Website

RESEARCH INTERESTS

Reinforcement Learning (RL), Imitation Learning, Vision-Language Action, Diffusion Policy Robotic Manipulation, Autonomous Navigation, Sensor Fusing, Sim-Real AI safety, Generative model, Multi-modal learning

EDUCATION

Korea University

Ph.D. - Artificial Intelligence

Chung-Ang University

B.E. - Electrical & Electronic Engineering

Mar. 2024 - Fe. 2029 (Expected)

Seoul, South Korea

Mar. 2017 - Fe. 2021 Seoul, South Korea

EXPERIENCE

• Structures-Computer Interaction Lab @ University of California, Los Angeles

Mar. 2025 - Present

Visiting Graduate Researcher; 3D Farm Project Lead (Advisor: Prof. Khalid)

- RL-based autonomous navigation & manipulation with multi-sensor fusion (in progress)
- Eye-in-Hand autonomous robotic arm manipulation (in progress)
- Integrated UGV field robotics system deployment [J2]

• Computer Vision Lab @ Korea University

Mar. 2024 - Fe. 2025

Ph.D. Student Researcher (Advisor: Prof. Sangpil Kim)

- Adversarial noise for Deepfake AI safety (collaborated with Dr. Jaewook Chung @ Samsung Research) [C2]
- Multi-modal audio-to-video generation (collaborated with Dr. Eugenio Culurciello @ Purdue Univ.) [J1]
- Computer Vision Lab @ Korea University

Jul. 2023 - Fe. 2024

Undergraduate Research Intern (Advisor: Prof. Sangpil Kim)

• Diffusion-based long video generation (collaborated with Dr. Wonmin Byeon @ NVIDIA Research) - [C1]

PUBLICATIONS C=Conference, J=Journal

- [C2] Jaehwan Jeong, Sumin In, Sieun Kim, Shin han yi, Jonghen Jeong, Sang Ho Yoon, Jaewook Chung, Sangpil Kim, FaceShield: Defending Facial Image against Deepfake Threats, International Conference on Computer Vision (ICCV) 2025 [PDF] [GitHub]
- [C1] Gyeongrok Oh, Jaehwan Jeong, Sieun Kim, Wonmin Byeon, Jinkyu Kim, Sungwoong Kim, Sangpil Kim, MEVG: Multi-event Video Generation with Text-to-Video Models, European Conference on Computer Vision (ECCV) 2024 [PDF] [GitHub]
- [J2] Jaehwan Jeong, Tuan-Anh Vu, Mohammad Jony, Shahab Ahmad, Md. Mukhlesur Rahman, Sangpil Kim, M. Khalid Jawed, *AgriChrono: A Multi-modal Dataset Capturing Crop Growth and Lighting Variability with a Field Robot*, under review, 2025 [PDF] [GitHub]
- [J1] Sieun Kim, Jaehwan Jeong, Sumin In, Seung Hyun Lee, Seungryong Kim, Saerom Kim, Wooyeol Baek, Sang Ho Yoon, Eugenio Culurciello, Sangpil Kim, Semantically Complex Audio to Video Generation with Audio Source Separation, Engineering Applications of Artificial Intelligence (JCR IF Top 10%) 2025 [PDF] [GitHub]

ACADEMIC SERVICE

Conference Reviewer

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025

IEEE/CVF International Conference on Computer Vision (ICCV), 2025

The 29th International Conference on Developments in Language Theory (DLT), 2025

Journal Reviewer

Computer Vision and Image Understanding (CVIU), 2025

Engineering Applications of Artificial Intelligence (EAAI), 2025

SKILLS

Programming

PyTorch, TensorFlow, Hugging Face, scikit-learn, OpenCV, Open3D, ROS (Robot Operating System), Flask, WebRTC (Janus)

Languages

Native speaker in Korean

Fluent in English