

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** Mar. 2024 - Fe. 2029 (Expected)
Ph.D. - Artificial Intelligence Seoul, South Korea
- **Chung-Ang University** Mar. 2017 - Fe. 2021
B.E. - Electrical & Electronic Engineering 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

- [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]
- [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]
- [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