# Jaehwan Jeong

**■** Email | **②** WhatsApp | **☎** Google Scholar | **in** LinkedIn

## RESEARCH INTERESTS

3D reconstruction, Robot operating system, Autonomous driving AI safety, Generative model, Multi-modal learning Machine learning, Deep learning, Computer vision

#### **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 (Advisor: Prof. Khalid)

• End-to-end development of crop-aware field robot system for 3D farm reconstruction and navigation using 3DGS SLAM and RTG-based teleoperation (*in progress*)

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

• Military Officer

Mar. 2021 - Jun. 2023

Signal Company, 5th Armored Brigade, Republic of Korea Army

- Wired communication network management (UTP, Optical cables) 1st Lieutenant
- o Operations and Tactical Planner 2nd Lieutenant

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]
- [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]
- [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 (Elsevier, JCR IF Top 10%) 2025 [PDF]

#### **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