

Jaehwan Jeong

[Email](#) | [Google Scholar](#) | [LinkedIn](#) | [Website](#)

RESEARCH INTERESTS

Embodied AI, Robotic Learning, Autonomous Systems
Multi-modal learning, Generative model, AI safety

EDUCATION

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

EXPERIENCE

- | | |
|---|------------------------------|
| • Structures-Computer Interaction Lab @ University of California, Los Angeles (UCLA)
<i>Visiting Graduate Researcher; 3D Farm Project Lead (Advisor: Prof. M. Khalid Jawed)</i> | <i>Mar. 2025 - Present</i> |
| ◦ VLN & RL-driven safe autonomy for UGV via multi-sensor fusion (<i>in progress</i>) | |
| ◦ Eye-in-Hand autonomous robotic arm manipulation - [J3] | |
| ◦ Integrated UGV field robotics system deployment - [J2] | |
| • Computer Vision Lab @ Korea University
<i>Ph.D. Student Researcher (Advisor: Prof. Sangpil Kim)</i> | <i>Mar. 2024 - Present</i> |
| ◦ Adversarial noise for Deepfake AI safety (<i>collaborated with Dr. Jaewook Chung @ Samsung Research</i>) - [C2] | |
| ◦ Multi-modal audio-to-video generation (<i>collaborated with Dr. Eugenio Culurciello @ Purdue Univ.</i>) - [J1] | |
| • Computer Vision Lab @ Korea University
<i>Undergraduate Research Intern (Advisor: Prof. Sangpil Kim)</i> | <i>Jul. 2023 - Fe. 2024</i> |
| ◦ Diffusion-based long video generation (<i>collaborated with Dr. Wonmin Byeon @ NVIDIA Research</i>) - [C1] | |
| • Military Officer
<i>Signal Company, 5th Armored Brigade, Republic of Korea Army</i> | <i>Mar. 2021 - Jun. 2023</i> |
| ◦ Operations and Tactical Planner - 1st Lieutenant | |
| ◦ Wired communication network management (UTP, Optical cables) - 2nd Lieutenant | |

PUBLICATIONS

C=CONFERENCE, J=JOURNAL

- [J3] **Jaehwan Jeong***, Tuan-Anh Vu*, Radha Lahoti, Jiawen Wang, Vivek Alumootil, Sangpil Kim, M. Khalid Jawed, *Vision-Guided Targeted Grasping and Vibration for Robotic Pollination in Controlled Environments*, under review, 2025 [\[PDF\]](#) [\[Code\]](#)
- [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 [\[PDF\]](#) [\[Project\]](#) [\[Code\]](#)
- [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 [\[PDF\]](#) [\[Code\]](#)
- [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 [\[PDF\]](#) [\[Code\]](#)
- [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 [\[PDF\]](#) [\[Code\]](#)

ACADEMIC SERVICE

- **Conference Reviewer**

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025, 2026

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, 2026

PATENTS

- [P1] Jaehwan Jeong, Sangpil Kim, *Method and Apparatus for Protecting Facial Image based on Disturbance Signal to Counter Deepfake Attack*, Korean Patent, No. 10-2025-0118588 (2025.08.25)

SKILLS

- **AI & Perception**

Diffusion Models, VLN(A), Adversarial Attack,
Reinforcement Learning, 3D Reconstruction

- **Robotics & Sensor Fusion**

Unmanned Ground Vehicle (UGV), Robotic Arms,
ROS 2, RGB-D Cameras, LiDAR, GNSS, IMU

REFERENCES

- **Asst. Prof. Sangpil Kim**

Department of Artificial Intelligence, Korea University, South Korea

- **Assoc. Prof. M. Khalid Jawed**

Department of Mechanical and Aerospace Engineering, University of California, Los Angeles

- **Postdoc. Tuan-Anh Vu**

Department of Mechanical and Aerospace Engineering, University of California, Los Angeles