

# Daeho Kim

Integrated MS-PhD student, Kyung Hee University, Korea Republic of.

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homepage

## Research Interest

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I am interested in Embodied AI, focusing on solving the problems that occur when AI operates in the physical world. I want to create a world where robots and humans live harmoniously.

## Education

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**Kyung Hee University**  
**M.S. - Ph.D in Software Convergence**

Gyeonggi-do Korea  
Sep. 2023 - Present

**Kyung Hee University, Republic of Korea**  
**B.S. in Software Convergence**

Gyeonggi-do Korea  
Mar. 2018 - Aug. 2023

- Majored in Robot & Vision Track
- Leave on absence due to military service (Jan. 2019 - Aug. 2020)  
**Assistant Instructor**, Ranger Training Unit, Republic of Korea Army Infantry School

## Publications

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### International papers

- [1] Stabilizing the Q-Gradient Field for Policy Smoothness in Actor-Critic Methods  
*International Conference on Machine Learning (ICML) 2026.*  
(Spotlight, acceptance rate = 2.2%)  
Jeong Woon Lee†, Kyoleen Kwak†, **Daeho Kim**†, and Hyoseok Hwang\*
- [2] Squeezing the Last Drop of Accuracy: Hand-Eye Calibration via Deep Reinforcement Learning-Guided Pose Tuning  
*IEEE Robotics and Automation Letters (RA-L) 2025.*  
(Presentation at ICRA 2026 in Vienna)  
Seunghui Shin, **Daeho Kim**, and Hyoseok Hwang\*
- [3] GAIA: Generating Task Instruction Aware Simulation Grounded in Real Contexts using Vision-Language Models  
*IEEE Robotics and Automation Letters (RA-L) 2025.*  
(Presentation at ICRA 2026 in Vienna)  
Dogyu Kot†, Chanyoung Yeot†, **Daeho Kim**, Jaeho Kim and Hyoseok Hwang\*
- [4] Camera-LiDAR Extrinsic Calibration using Constrained Optimization with Circle Placement  
*IEEE Robotics and Automation Letters (RA-L) Vol. 10, Issue:2, pp. 883-890, 2025.*  
(Presentation at ICRA 2025 in Atlanta)  
**Daeho Kim**, Seunghui Shin and Hyoseok Hwang\*
- [5] PAIR360: A Paired Dataset of High-Resolution 360° Panoramic Images and LiDAR Scans  
*IEEE Robotics and Automation Letters (RA-L) Vol. 9, Issue:11, pp. 9550-9557, 2024.*  
(Presentation at ICRA 2025 in Atlanta)  
Geunu Kim, **Daeho Kim**, Jaeyun Jang, and Hyoseok Hwang\*

### Domestic papers

- [1] Performance Validation of Target-based Camera-LiDAR Extrinsic Calibration on Simulation  
Summer Annual Conference of KIBME (special session), 2024  
**Daeho Kim**, and Hyoseok Hwang\*

## Projects

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### Developing OHT position-aware sensor technology

CanTops 

- Camera-Marker Pose Estimation / Localization

2024 - 2025

### Pick and Place system with 6-DOF Pose Estimation using DOPE



- Pick and Place / 6-DOF Pose estimation / Domain Generalization

2023

## Academic Experience

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### Teaching Assistant | Kyung Hee University

Gyeonggi-do Korea

- 3D Data Processing (SWCON36600)
- Robot Programming (SWCON33100)

Spring Sem. 2024.

Fall Sem. 2023.

### Silicon Valley Software Program | San Jose State University

California USA

- Silicon valley software innovation & Technology contest

Jan. 2021 - Feb. 2021

## Skills

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- Sensors - LiDAR, 360° camera, Fisheye camera, RGB-D camera, GPS, IMU
- Simulator - Gazebo, IsaacSim
- Frameworks - ROS, Open3D, OpenCV, PCL, PyTorch

## Languages

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- Korean - Native
- English - Business Competence
- Japanese - Conversational