

Eui Chan Kim

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Education

Sungkyunkwan University (2024.03~2026.02(expected))

- M.S of Intelligent Robotics
- Advisor: Prof. Hyouk Ryeol Choi
- 4.4/4.50 GPA

Sungkyunkwan University (2018.03~2024.02)

- B.S of Mechanical Engineering
- 3.91/4.50 GPA

Research Interests

3D Vision, 3D Reconstruction, Tool Path Planning, Robot Automation, Human Robot Interaction, Hand Tracking & Visual Servoing

Work Experience (Master's Degree)

SKKU Robotics Innovatory LAB

- Research & Develop Robotic Multi-View 3D Reconstruction Algorithm (2024.03 ~ 2024.06)
- Research & Develop Polishing Tool Path Planning Algorithm (2024.06 ~ 2024.12)
- Research & Develop CAD & 3D Scan Alignment Algorithm (2024.12 ~ 2025.01)
- Research & Develop No-Code Manipulator Hand Tracking & Teaching Algorithm (2025.01 ~)
- KRoC 2025 Poster Presentation: “정밀한 로봇 피니싱을 위한 Geodesic Hermite 곡선 기반 가공 경로 계획”

AIDIN Robotics

- Participate Robot World Exhibition 2024 & SFAW 2025
 - ✓ Surface Polishing Solution (3D Scan & Reconstruction, Tool Path Planning, Simulation, Force Control)

Work Experience (Undergraduate)

SKKU Robotics Innovatory LAB (Prof. Hyouk Ryeol Choi)

- Developed Electro Permanent Magnet (EPM) Magnetic Gripper & Magnetorheological Elastomer (MRE)

SKKU RISE LAB (Prof. Hyung Pil Moon)

- Developed “Contact angle Estimation Method” for the Wheels of a 6-Wheeled Robot on Deformable Terrain Using LiDAR Sensor, Encoder, Kinematics and ROS (2022-ICCAS)

Publication

N. Pico. And **Eui-Chan Kim**. et al, "Geometric Recognition of Diverse Terrain in Real-Time for a Six-Wheeled Robot based on Laser Scanning Sensors," 2022 22nd International Conference on Control, Automation and Systems (ICCAS), Jeju, Korea, Republic of, 2022, pp. 1924-1929, doi: 10.23919/ICCAS55662.2022.10003923

E. Kim, J. Shim, E. Song, and H.-R. Choi, “Hand-Gesture Based Robot Tracking and Teaching Framework: Demonstration in Surface Polishing Task,” IEEE Robotics and Automation Letters (RA-L), 2025. [Under Review]

Qualifications

- Craftsman 3D Printer Operation (2022.01)
- Computer Specialist in Spreadsheet & Database Level 1 (2022.03)
- OPIc: AL (2025.07)

Technical Skills

Language & Tools

- C++, C, Python, MATLAB, ROS, STM32, Inventor, Fusion360

Operating System

- Window, Linux

Opensource & Library

- PCL, OpenCV, Open3D, CGAL, MoveIt, VISP, MediaPipe, Tensorflow