

Jun-Gill Kang

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Agency For Defense Development (ADD), South Korea

Webpage: <https://jgkang1210.github.io/>

Google Scholar: [click](#)

RESEARCH INTERESTS

Solving highly dynamic control problem with simple single controller. Believe that combination of model based control and learning based model free approach can solve locomotion, manipulation, and flight control with one single controller with hierarchy.

EDUCATION

Pohang University of Science and Technology – POSTECH

Convergence IT Engineering, Mechanical Engineering (Double major), BTech, Feb 2022

GPA:4.09/4.3 (1th/9), Graduate representative (Include all U.G.)

EMPLOYMENT

Researcher

2023.06-2026.06(Expected)

Defense AI Center, Agency For Defense Development (ADD), South Korea

Role : Control of self-driving car in off-road environment. Exploration of multi robot in GPS denied cave.

Researcher

2022.06-2023.04

Mechanical Engineering, Korea Advanced Institute of Science and Technology (KAIST)

Dynamic Robot Control and Design Lab (DRCD) by Prof. Hae-won Park.

Role : Control of KAIST HOUND a versatile quadrupedal robot.

PUBLICATIONS

Refereed Journal Article

Development of Dual-Unit Ceiling Adhesion Robot System With Passive Hinge for Obstacle Traversal Under Kinodynamic Constraints, **IEEE Access**, 2023

Y. Song, **J. Kang**, T. Kim, and S.-C. Yu.

Conference Proceedings

A Highly Maneuverable Flying Squirrel Drone with Controllable Foldable Wings. **IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)**, 2023

J. Kang*, D. Lee*, and S. Han.

Multi-agent-based wall-climbing robot system for safety inspection of nuclear power plant. **Decommissioning Environmental Science and Remote Technology**, 2021

Y. Song, **J. Kang**, T. Kim, and S.-C. Yu.

Development of Safety-Inspection-Purpose Wall-Climbing Robot Utilizing Aerial Drone with Lifting Function. **The 18th International Conference on Ubiquitous Robots (UR)**, 2021

Y. Song, T. Kim, M. Lee, S. Rho, J. Kim, **J. Kang**, and S.-C. Yu.

Conference Workshop

Fast, Perceptive Quadrupedal Locomotion in Complex Terrain. **IEEE International Conference on Robotics and Automation (ICRA)**, 2024

J. Kang, J. Park, T. Song, and H. Park.

AWARDS AND HONORS

Mu-Eun-Jae Award

Pohang University of Science and Technology – POSTECH, 2022
Select one student every year among all total graduating students.

Talent Award of Korea

Deputy Prime Minister and Minister of Education award, 2020
For the spirit of challenging and continuous efforts on robotics, won 2020 Korea Talent Award. Select only 100 people every year in South Korea from diverse area (Athlete, Researcher, Talents, CEO, etc.)

GRANTS AND FELLOWSHIPS

Creative IT Engineering Scholarship

2019 - 2021
Korea Government
15K USD + Half year study abroad full funding (Stony brook University, NYC)

Research Officers for National Defense Scholarship

2021 - 2023
Korea Government
15K USD

INVITED TALKS

Graduation congratulatory speech

Pohang University of Science and Technology – POSTECH, 2022
As graduation representative gave speech about our future life after graduation.

CONFERENCE ACTIVITY

Papers Presented

A Highly Maneuverable Flying Squirrel Drone with Controllable Foldable Wings. IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023
Oral and poster session.

SERVICE TO PROFESSION

Reviewer

IROS (2024)