

EDUCATION

Master of Science in Aerospace Engineering

Chosun University, Gwangju, Republic of Korea

Advisor: Assoc. Prof. Sunghun Jung, Department of Aerospace Engineering, Chosun University

Mar 2026

GPA: 4.3 / 4.5

Bachelor of Science in Engineering, Department of Aerospace Engineering

Chosun University, Gwangju, Republic of Korea

Feb 2026

GPA: 3.94 / 4.5

RESEARCH INTEREST

- Cooperative control and recovery of heterogeneous unmanned systems
- Resource-aware and disturbance-robust guidance, navigation, and control
- Model-based design and real-time verification using MILS, SILS, PILS, and HIL
- PX4-ROS 2-Gazebo-Simulink integration for autonomous unmanned systems

PUBLICATIONS (Journal, Non-KCI)

- H. Myung, **J. Kang**, and S. Jung, "Resource-Aware Supervisory Allocation Between APF and MPC for Embedded UAV Navigation," Space Note, vol.3, no.1, pp.20-31, Jun. 2026

PUBLICATIONS (Conference)

- **J. Kang**, H. Myung, W. Na, S. Kim, and S. Jung*, Cooperative Swarm Missions of Unmanned Aerial and Surface Vehicles, Poster Presented at the 2025 Korean Society for Aeronautical and Space Sciences (KSAS) Fall Conference, Gangwon, South Korea, Nov. 2025.
- A. Zegeye, **J. Kang**, and S. Jung*, Nonlinear Control of Unmanned Underwater Vehicle Based on Model-Based Nonlinear PID Controller with Disturbance Observer, Poster Presented at the 2024 Korean Society of Mechanical Engineers (KSME) Fall Conference, Jeju, South Korea, Nov. 2024.

PATENTS

- S. Jung, S. Kim, **J. Kang**, K. Baek, and Y. Jo, Thrust Vector Control System for Attitude Control of Single-Engine Vertical Takeoff and Landing Aircraft, Korean Patent Application, filed Oct. 30, 2025 (Under Review)

AWARDS

- The 1st Aerospace Field Bootcamp Idea Competition, Encouragement Award, Taegyu Kim (Director), Jan. 2025