

Jonghae Park

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Education

- Seoul National University**, Seoul, Republic of Korea Mar. 2023 – Present
Ph.D. Student in Aerospace Engineering
Advisor: Professor H. Jin Kim
Research Area: Unsupervised Reinforcement Learning, Robot Learning
- Seoul National University**, Seoul, Republic of Korea Mar. 2016 – Feb. 2023
B.S. in Mechanical Engineering
Leave of absence for military service: Feb. 2018 – Jan. 2020

Publications (* Equal Contribution)

- EigenSafe: A Spectral Framework for Learning-Based Probabilistic Safety Assessment**
Inkyu Jang*, **Jonghae Park***, Sihyun Cho, Chams E. Mballo, Claire J. Tomlin, H. Jin Kim
Robotics: Science and Systems (RSS), 2026
Conference on Robot Learning (CoRL) SAFE-ROL workshop, 2025 (Oral)
- Temporal Action Representation Learning for Tactical Resource Control and Subsequent Maneuver Generation**
Hoseong Jung, Sungil Son, Daesol Cho, **Jonghae Park**, Changhyun Choi, H. Jin Kim
IEEE International Conference on Robotics and Automation (ICRA), 2026
- Periodic Skill Discovery**
Jonghae Park, Daesol Cho, Jusuk Lee, Dongseok Shim, Inkyu Jang, H. Jin Kim
Conference on Neural Information Processing Systems (NeurIPS), 2025
- CQM: Curriculum Reinforcement Learning with a Quantized World Model**
Seungjae Lee, Daesol Cho, **Jonghae Park**, H. Jin Kim
Conference on Neural Information Processing Systems (NeurIPS), 2023

Projects

- Simulated Manned-Unmanned Aircraft Teaming** Feb. 2025 – Present
In collaboration with Agency for Defense Development (ADD)
- AI Virtual Aircraft Air-to-Air Combat** Feb. 2024 – Apr. 2025
In collaboration with Korea Aerospace Industries (KAI)
- AI Tank Crew Development Based on Deep Reinforcement Learning** Feb. 2023 – Feb. 2024
In collaboration with Agency for Defense Development (ADD)

Teaching

- Teaching Assistant, Motion Planning and Decision Making for Autonomous Systems (M3229.003300)** Spring 2026
Department of Aerospace Engineering, Seoul National University
- Teaching Assistant, Principles of Flight Vehicle Control (M2795.002600)** Spring 2026
Department of Aerospace Engineering, Seoul National University
- Teaching Assistant, Hyundai Motor Company AI Boosting Camp** Aug. 2025
Innovation Center for Engineering Education, Seoul National University
- Teaching Assistant, Principles of Flight Vehicle Control (M2795.002600)** Spring 2023
Department of Aerospace Engineering, Seoul National University

Scholarships

Next-Generation Scholar Fellowship in Basic Academic Fields

Mar. 2026 – Feb. 2027

KRW 24 million/year

Seoul National University

Awards

Outstanding B.S. Thesis Presentation Award

Dec. 2022

Thesis: Vision-Based Reinforcement Learning for Quadruped Locomotion Control

Department of Mechanical Engineering, Seoul National University

Presidential Award, Undergraduate Research Program

Feb. 2022

Title: Efficient Sim-to-Real Transfer for RL-Based Hexapod Locomotion via Simulation Parameter Tuning

Seoul National University

Encouragement Award, Social Contribution Plus Competition

Nov. 2020

Seoul National University Social Responsibility (SNUSR)

Grand Prize, Mechanical Product Design Competition

Jul. 2020

Department of Mechanical Engineering, Seoul National University

Technical Skills

Programming: Python, JAX, PyTorch

Robotics and Simulation: Universal Robots UR3, MuJoCo, Gym/Gymnasium, SolidWorks