Jonghae Park

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Education

Princeton University, Princeton, NJ, USA — Oct. 2026 – Present
Visiting Ph.D. Student
Advisor: Benjamin Eysenbach

Seoul National University, Seoul, Republic of Korea — Mar. 2023 – Present
Ph.D. Student in Aerospace Engineering
Advisor: H. Jin Kim
Research Area: Self-Supervised 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)

Hyperspherical Contrastive Representations Unlock Planning and Exploration
Jonghae Park*, Sungil Son*, Jonghun Shin, Junseo Lee, H. Jin Kim, Benjamin Eysenbach
Preprint, 2026

FLAG: Flow Policy MaxEnt-RL by Latent Augmented Guidance
Sungha Kim*, Gawon Lee*, Jusuk Lee, **Jonghae Park**, H. Jin Kim, Daesol Cho
Conference on Neural Information Processing Systems (NeurIPS), 2026

BooST: Bridging Semantics and Motions for Efficient Skill Transfer
Jusuk Lee, Daesol Cho, Jonghun Shin, Seungyeon Yoo, **Jonghae Park**, Taekbeom Lee, H. Jin Kim
IEEE Robotics and Automation Letters (RA-L), 2026

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

Top Reviewer Award — Oct. 2026
NeurIPS 2026

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

Academic Services

Conference Reviewer — 2027
International Conference on Learning Representations (ICLR)

Conference Reviewer — 2026
Conference on Neural Information Processing Systems (NeurIPS)

Technical Skills

Programming: Python, JAX, PyTorch
Robotics and Simulation: Universal Robots UR3, MuJoCo, Gym/Gymnasium, SolidWorks