



Mingyu Park

AI RESEARCHER · ROBOTICS EXPERT

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🐦 @mngupark | 🎓 Mingyu Park

“True failure is what not trying to challenge, not what you couldn’t overcome today.”

Summary

My research goal is to build **real-world** robots that can perform control tasks with human-level abilities and generalize to unseen situations using **artificial general intelligence** (AGI). I’m especially interested in developing practical methods for sequential decision-making problems. My current mission toward this goal is to devise a general method that can recover an expert policy from **static datasets** under **high-dimensional** sensory input. Formally, my research interest interleaves between **offline reinforcement learning**, **self-supervised learning**, and **foundation models**.

Education

Kwangwoon University

B.S. IN ROBOTICS ENGINEERING

- **Total GPA:** 4.18/4.50 **Major GPA:** 4.43/4.50

Seoul, S.Korea

Mar. 2017 - Feb. 2023

KAIST (Korea Advanced Institute of Science and Technology)

M.S. IN ROBOTICS PROGRAM

- Advised by *Prof. Donghwan Lee*
- **Total GPA:** 3.94/4.30

Daejeon, S.Korea

Mar. 2023 - Now

Experience

KIST (Korea Institute of Science and Techonology)

UNDERGRADUATE RESEARCH ASSISTANT

- Implemented an optimal control system of the fixed-base redundant dual-arm manipulators.
- Implemented a ROS framework to the manipulator system.
- Researched a method that can reduce the computational cost of the optimal controller for real-time control.

Seoul, S.Korea

Jun. 2021 - Dec. 2021

Seoul National University (DYROS, Dynamics Robotics Systems Lab)

UNDERGRADUATE RESEARCH INTERN

- Researched a mobile robot navigation system using SLAM and extended Kalman filter.
- Researched an efficient map construction and navigation using multiple sensors on a single robot.
- Researched a whole-body controller using hierarchical quadratic programming for a mobile manipulator system.

Seoul, S.Korea

Jan. 2022 - Oct. 2022

Publications

JOURNAL

- **Park, M.**, Kim, D., Oh, Y., Lee, Y. (2022). Computational Cost Reduction Method for HQP-based Hierarchical Controller for Articulated Robot. *The Journal of Korea Robotics Society*, 17(1), 16-24.

Skills

Programming Languages	Python, C, C++, HTML, CSS, JavaScript
Frameworks	Robot Operating System (ROS) 1 & 2, Matlab, Docker, Tensorflow, PyTorch, Jax
Simulators	Gazebo, MuJoCo, CoppeliaSim, Raisim, IsaacSim
Languages	Korean, English, Japanese

Extracurricular Activity

BARAM (Robotics Academic Group in Kwangwoon University)

S.Korea

CORE MEMBER

Mar. 2020 - Dec. 2022

- Gained academic knowledge related to robotics such as computer vision and control engineering.
- Gained expertise in crafting a robot from scratch and insight to analyze complex systems.
- Obtained leadership and supervised group members serving as club director.

International Elite Summer School in Robotics & Entrepreneurship

Denmark

MEMBER

Aug. 2023

- Gained knowledge about advanced technologies for designing robotic systems and entrepreneurship in robotic startup companies.
- Enlarge an international network with peer students from various countries and visit leading Danish robotics companies.

Scholarships & Awards

SCHOLARSHIPS

Mar. 2017 **Kwangwoon Dream**, Admission Scholarship

Seoul, S.Korea

Sep. 2017 **Kwangwoon Dream**, Admission Scholarship

Seoul, S.Korea

Sep. 2020 **Quarter tuition scholarship**, Academic Excellence Scholarship

Seoul, S.Korea

Mar. 2021 **Full tuition scholarship**, Academic Excellence Scholarship

Seoul, S.Korea

Sep. 2021 **Half tuition scholarship**, Academic Excellence Scholarship

Seoul, S.Korea

Sep. 2022 **Half tuition scholarship**, Academic Excellence Scholarship

Seoul, S.Korea

AWARDS

Mar. 2021 **Dean's List**, Academic Excellence Award

Seoul, S.Korea

Sep. 2021 **Dean's List**, Academic Excellence Award

Seoul, S.Korea

Sep. 2022 **Dean's List**, Academic Excellence Award

Seoul, S.Korea