# Yohan Park

john.a.park@kaist.ac.kr yohanpark.me

INTERESTS

Embodied AI, Robotic Foundation Models, Multimodal Learning, Long-Horizon Planning

EDUCATION

**Korea Advanced Institute of Science and Technology (KAIST)** Daejeon, Republic of Korea
M.S. Student Mar 2026–
Advanced Machine Intelligence (AMI) Lab, advised by Prof. Tae-Hyun Oh

**Korea Advanced Institute of Science and Technology (KAIST)** Daejeon, Republic of Korea
B.S., Double Major in Electrical Engineering & Computer Science Feb 2019 – Aug 2025

**Hansung Science High School** Seoul, Republic of Korea
High School Diploma Feb 2016 – Feb 2019

PUBLICATIONS

*J: Journal, C: Conference, D: Domestic (*: Equal contribution, †: Corresponding author)*

**Journal Articles**

J01. **Yohan Park**, H. Ha, W. Jo, T.-H. Oh†, "DarkQA: Benchmarking Vision-Language Models for Visual-Primitive Question Answering in Low-Light Indoor Scenes."
***IEEE Robotics and Automation Letters (RA-L) 2026***

**Conference Papers**

C02. W. Jo, N. Hyeon-Woo, **Yohan Park**, H. Ha, T.-H. Oh†, "When Fine-Tuning Drifts: Mitigating Policy Drift with Base Action-Field Regularization."
***Under Review***

C01. J. Kim*, K. Koh*, S.S. Lee, **Yohan Park**, D. Park†, "Reactive Constraint Relaxation for Urban Environment Navigation."
***Conference on Robot Intelligence Technology and Applications (RiTA) 2024*** (Best Student Paper Award)

D02. **Yohan Park**, H. Ha, T.-H. Oh†, "A Depth-Map-Based Semantic Label Transfer System for Embodied Agents Using Scene Memory."
***Workshop on Image Processing and Image Understanding (IPIU) 2026*** (Best Paper Award: Honorable Mention)

D01. **Yohan Park**, D. Choi, "A Study on the Stability of Humanoid Robots with Respect to Foot Structure."
***Korea Robotics Society Annual Conference (KRoC) Future Robotic Scientist session 2017*** (Best Student Paper Award)

RESEARCH EXPERIENCE

**KAIST Advanced Machine Intelligence (AMI) Lab** Daejeon, Republic of Korea
*Research intern* | Advisor: Prof. Tae-Hyun Oh Apr 2025–Feb 2026

- Built DarkQA [J01], an open-source benchmark for evaluating perceptual primitives under multi-level low-light conditions in embodied scenarios
- Developed a depth-based semantic perception module for night-time embodied task execution [D02]

**KAIST Robust Intelligence & Robotics (RIRO) Lab** Daejeon, Republic of Korea
*Research intern* | Advisor: Prof. Daehyung Park Dec 2023–Feb 2025

- Fine-tuned a semantic segmentation model for outdoor robot navigation with increased label space
- Integrated Behavior Trees with ROS-based navigation planner, enabling long-horizon task execution with robust recovery behavior; validated on Boston Dynamics Spot
- Developed an RViz plugin for waypoint navigation in CARLA simulation and real-robot navigation

## SKILLS

**Languages:** English (Fluent) | iBT TOEFL (MyBest Score): 109/120 (R: 29, L: 29, S: 26, W: 25), Chinese (Intermediate), German (Beginner), Korean (Native)

**Programming:** Proficient in Python, C, C++, ROS; Familiar with X86-64 & MIPS Assembly, JAVA, Scala

**Tools:** Git, Docker, Anaconda, CMake, MATLAB, Adobe XD, LaTeX

## HONORS AND AWARDS

**IPIU 2026 Best Paper Award** | IPIU 2026

IPIU 2026 Best Paper Award (Honorable Mention) for a first-author paper

**RiTA 2024 Best Student Paper Award** | RiTA 2024

Awarded to top 1 paper among all submissions to RiTA 2024 [article]

**Youngpro Global Startup Pitch Competition** | Youngpro 2021

Special Award; served as team leader

**KAIST App Service Start-up Competition** | KAIST 2021

Excellence award (6th place out of 20 finalist teams); served as team CEO

**KRoC 2017 Best Student Paper Award** | Korea Robotics Society 2017

Awarded to top 1 out of 13 teams in Future Robotic Scientist session [article]

## PROJECTS

**Knowledge graph-guided autoregressive test generation for diversity-based LLM prompt testing**

(CS453 Automated Software Testing) Feb 2025–Jun 2025

- Proposed the project and independently designed a system for knowledge graph-guided, diversity-based prompt testing of Large Language Models (LLMs); implemented collaboratively with team members

**Finite State Machine-based manipulator system for teleoperation and trajectory control**

(EE405 Electronics Design Lab) Sep 2024–Dec 2024

- Developed a finite state machine (FSM)-based control system for teleoperation and waypoint trajectory control of a 4-DoF manipulator, handling real-time communication with host machine

**Whole-body manipulation of quadrupedal mobile manipulator via imitation learning**

(CS477 Introduction to Intelligent Robotics) Feb 2024–Jun 2024

- Developed a CVAE-based imitation learning system for 9-DoF mobile manipulator control extending the Mobile ALOHA framework, achieving a 60% average task success rate

## STARTUP EXPERIENCE

**tPilot** Daejeon, Republic of Korea

Project Founder | All-in-one travel guide service Sep 2024–Dec 2024

- Selected to lead a team for the 2024 KAIST Silicon Valley Entrepreneurship Workshop and Mentoring Program, preparing investor relations (IR) pitches for a U.S. audience
- Initiated a large language model (LLM)-powered travel guide service, enhancing user experience across planning, re-planning, and booking stages

**Connected** Daejeon, Republic of Korea

Co-Founder & CEO | Social media startup for offline relationships 2021–2022

- Led team to the KAIST App Service Startup Competition finals, placing 6th among 20 teams.
- Developed an social networking app emphasizing offline relationships through geometric data analysis

## MISCELLANEOUS

**Chongqing Liangjiang KAIST International Program Mentor** Aug 2020–Jun 2021

**KAIST FEEL (KAIST EE Conference Camp) Program director** Apr 2020–Dec 2021

**KAIST Electrical Engineering Student Council Executive Branch** Mar 2020–Dec 2021

**KAIST ISO (International Student Organization) Club** Mar 2019–Dec 2020