Youngeon **Kim**

ROBOTICS RESEARCHER · FIELD ROBOTICS ENGINEER

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"seize the day."

Summary

This is YoungEon Kim, a robotics researcher and engineer. My research interests lie in advancing multi-robot systems and autonomous navigation. I am particularly focused on developing collaborative path planning systems and optimizing mobile navigation to enhance the efficiency and adaptability of robots in dynamic environments.

Education

Keymyung University *Daegu, S.Korea*

B.S. in Robotics Engineering *Mar. 2017 - Feb. 2023*

- GPA : 4.2 / 4.5 major GPA : 4.4 /4.5

Internships

Robot Dynamics and Intelligent Control Lab *Daegu, S.Korea*

Undergraduate researcher *Mar. 2021 - Jan. 2022*

- Designed and implemented Multi-DOF Control Systems
- Managed motor dynamics with MFC

Work Experience

Korea Electronics Technology Institute, KETI *Seoul, S.Korea*

Researcher *May. 2023 - Current*

- Multi Robot System
- Robot Elevator System
- mobile robot navigation system
- Docking Process develop
- Deployed a centralized logging environment which gather log data from docker containers

Korea Institute of Robotics, KIRO *Gumi, S.Korea*

Intern *July. 2022, Mar. 2023*

- Education of Robotics
- Manipulator

Projects

Development of Cooperate Mapping, Environment Recognition and Autonomous Driving Technology for Multi Mobile Robots Operating in Large-scale Indoor Workspace *KETI*

PARTICIPANT *May. 2023 - Current*

- Developement Multi Robot System Envorinment Mobile Robot Navigation With Open-RMF

Collaboration Intelligence-Based Robot Plus Competitiveness Support Project *KETI*

PARTICIPANT *May. 2023 - Current*

- Developed a robot system for manufacturing logistics automation processes.
- Established inter-cell logistics lines using a pick-and-drop sequence.
- Integrated AGVs with manufacturing logistics processes through upper-level control using TCP/IP communication protocols.

Development and Validation of BM and Robots for Software Defined Robot Domain Services *KETI*

PARTICIPANT *Jan. 2025 - Current*

- Currently in Progress.

Domestic Conference

Cooperative Autonomous Driving System for Multi-Mobile Robots Using Open-RMF — *KROS*

Youngeon Kim, Keunhwan Kim, Dong Yeop Kim — *Feb. 2024*

- Korea Robotics Society (KROS) 455-456

Method for Cross-Utilization of Obstacle Recognition Information in a Multi-Robot System for Collaborative Path Planning — *ICROS*

Youngeon Kim, Keunhwan Kim, Dong Yeop Kim — *July. 2024*

- Institute of Control, Robotics and Systems, Korea(ICROS) 455-456

Traversability Assessment and Path Planning Using Obstacle Recognition Information for Multi-Robot System — *ICCAS*

Youngeon Kim, Dong Yeop Kim Keunhwan Kim — *Oct. 2024*

- International Conference on Control, Automation and Systems(ICCAS) (not Domestic) 1670 - 1671

Skills

DevOps	Docker, Git, ROS2/ROS
Programming	Node.js, Python, C++/C, Matlab
Languages	Korean, English

Extracurricular Activity

Robotics Blog — *Github Blog*

WRITER — *Dec. 2022 - Current*

- Sharing my studies and notes on robotics through this blog.
- Here is the link to my blog.

Transforming Hybrid Operational Robot — *KMU*

PARTICIPANT — *Dec. 2021 - Jun. 2022*

- Design of a four-legged robot with a vertically adjustable body frame and wheels on each leg.
- Tested and assembled the design using CATIA and produced the final model through 3D printing.
- Developed sensor and actuator control systems and driving algorithms using ROS packages.