

Jiwon Park

 ziwon-park.com

 youtube.com/@zzziito

 zzziito.park@gmail.com

 github.com/zzziito

 Yongin-si, Republic of Korea

 zzziito.tistory.com/

SUMMARY

Passionate student specializing in robot perception, with a talent for developing robotic system software. Dedicated to advancing research in robust perception techniques to enhance the reliability of outdoor mobile robots.

RESEARCH INTERESTS

- Robot Perception
- Off-road Mobile Robot
- Traversable Region Segmentation

EDUCATION

Mar. 2019 - **Kyung Hee University** **Yongin-si, Korea**
Aug. 2024
B.S course in Department of Electronic Engineering, Software Convergence (Robot Vision Track)

EXPERIENCE

Mar. 2024 - **NAVER LABS** **Seongnam-si, Korea**
Sep. 2024
Internship

- Developed software of inference board for robot, enhancing on-board processing capabilities
- Implemented deep learning model optimization techniques for low-cost NPUs
- Integrated third-party robots into multi-robot intelligence system (ARC)
- Developed monitoring applications for robot experiments

ROS1 / ROS2 / RKNN / gRPC / MQTT / CMake / Flutter

Dec. 2023 - **ROBROS** **Seoul, Korea**
Feb. 2024
Internship

- Developed experimental environments for robotic arms using MuJoCo simulation platform
- Proposed a transformer-based model for detecting collisions in robotic arms without external sensors, relying on joint position and torque controllers

ROS1 / MuJoCo / PyTorch

Apr. 2022 - **Purdue University** **West Lafayette, IN, USA**
Aug. 2022
Student Intern

- Conducted research on outdoor mobile visual SLAM (Simultaneous Localization and Mapping)
- Focused on enhancing accuracy and reliability of visual navigation for mobile robots

PUBLICATIONS

INTERNATIONAL CONFERENCES

Dec. 2023 **BumpyPatch: Heightmap-based Outdoor Point Cloud Segmentation to Find Less Bumpy Road**
IEEE International Conference on Robotic Computing (IRC), 2023
Jiwon Park and Hyoseok Hwang

Dec. 2022 **Outdoor Visual SLAM and Path Planning for Mobile-Robot**
IEEE International Conference on Robotic Computing (IRC), CHARMS workshop, 2022
Seongil Heo, Jueun Mun, Jiwoong Choi, **Jiwon Park**, Eric T. Matson

DOMESTIC JOURNAL

Aug. 2024 **Transformer based Collision Detection Approach by Torque Estimation using Joint Information**
Journal of Korea Robotics Society Vol.19 No.3
Jiwon Park, Daegy Lim, Sumin Park, Hyeonjun Park

SKILLS

- ROS 1, ROS 2
- Docker
- Git
- C++
 - CMake
- Python
 - PyTorch
 - OpenCV, Open3D

AWARD & HONORS

- Mar. 2023 - Aug. 2024 **Full-ride scholarship until graduation**
 - KC Future Foundation
- Apr.2022- Aug.2022 **Purdue-Korea Software Square Program**
 - Ministry of Science and ICT
- Dec.2022 **SW Festival, Grand Prize**
 - Kyung Hee University, Software College
- Nov.2021 **The World Embedded Software Contest, Participation Award**
 - Korea Embedded Software and System Industry Association
- Dec.2020 **Open SW Utilization Contest, Excellence Prize**
 - Kyung Hee University, Software College
- Jul.2020 **Autonomous Mini-drone Aviation Competition, Excellence Prize**
 - Korean Institute of Electrical Engineers

LANGUAGES

- English** Proficient (TOEIC : 945)
- Korean** Native