



# SeokWon Choi

ROBOTICS · SLAM · COMPUTER VISION

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"Widely beneficial to the world."

## Introduction

This is SeokWon Choi who want to create new and useful things. I am interested in Robotics, SLAM and Computer Vision. Because it will make helpful things for people. Hope that one day what I have created will be helpful to many people in the world.

## Education

### KwangWoon University

Seoul, S.Korea

B.S. IN SCHOOL OF ROBOTICS

Mar. 2017 - Feb. 2023(Expected)

- Current GPA : 4.38/4.50, Current Major GPA : 4.50/4.50
- Club : BARAM(Robotics Academic Group)

## Work Experience

### Robotics A.I. Lab @KwangWoon Univ

Seoul, S.Korea

UNDERGRADUATE LAB INTERN

Mar. 2021 - Dec. 2021

- Research on SLAM, Path Planning, Multi-Robot.
- Participated in the Multi-Robot automatic driving project.

### Urban Robotics Lab @KAIST

Daejeon, S.Korea

UNDERGRADUATE LAB INTERN

Jan. 2022 - Present

- Research on Multi-Robot SLAM
- Participated in the Unmanned Swarm CPS project.

## Publication

- 2021.10 **CICS21**, Seokwon Choi, Seokjun Moon, Junghyun Oh,"Searching Window Approach to Multi-robot Collision Avoidance"-[Paper]

CICS

## Honors & Awards

### AWARDS

- 2020.11 **Dean's List**, for Academic Excellence  
2021.10 **Dean's List**, for Academic Excellence

KwangWoon Univ.  
KwangWoon Univ.

### HONORS

- 2020-2 **Full tuition Scholarship**, for Top seat last semester  
2021-1 **Half tuition Scholarship**, for 2nd seat last semester

KwangWoon Univ.  
KwangWoon Univ.

## Skills

- Programming** C++/C, Python, JAVA, Matlab  
**DevOps** ROS, ROS2  
**Framework** Pytorch, TensorFlow  
**Languages** Korean(native), English(TEPS:336)

## Projects

## Universal Mobile Robot

CAMERA, LiDAR, ROS

- We made modular service mobile robot.
- A new service is provided by changing the module.
- Through this project, I learned about teamwork, ROS, camera, LiDAR

*Capstone(KwangWoon Univ.)*

*Mar. 2022 - Jun. 2022*

## Implementation of Visual Odometry

VISUAL ODOMETRY, ROS

- I thought that visual SLAM was an indispensable technology for mobile robots, so I implemented it.
- Through this project, I learned about Computer Vision, SLAM, and ROS.

*Individual(Club BARAM)*

*Sep. 2021 - Nov. 2021*

## Multi-Robot automatic driving

SLAM, ROS

- It aims to automatic drive multiple mobile robots on ROS.
- I was in charge of applying mapping, localization, and navigation.
- Through this project, I dealt with ROS and SLAM.

*Robotics A.I. lab(KwangWoon Univ.)*

*Apr. 2021 - Sep. 2021*

## DeepLearning Basics with Pytorch

DEEPLARNING, PYTORCH

- I have covered the basics of deep learning with the PyTorch framework.

*Individual*

*Jan. 2021 - Mar. 2021*

## Parking Lot Map Application

ANDROID, JAVA

- We have created an application that informs the location and fee of the parking lot.
- As a team leader, I was in charge of overall Android coding.
- Through this project, I learned how to collaborate code and how to use JAVA.

*Team Project(Club BARAM)*

*Aug. 2020 - Dec. 2020*