

# Taehun Ryu

Graduate Student  
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[Portfolio Site](#)

## EDUCATION

<b>Ulsan National Institute of Science and Technology</b> Artificial Intelligence Graduate School, 3D Vision & Robotics Lab, M.S. course	03/2025 ~ Present GPA: 4.10/4.3
<b>Hanyang University ERICA</b> <b>Major:</b> Department of Robot Engineering <b>Minor:</b> Department of Artificial Intelligence	03/2019 ~ 08/2024 GPA: 4.18/4.5

## RESEARCH INTEREST

Visual SLAM  
Robot Vision

## RESEARCH EXPERIENCE

<b>Graduate Research Intern / UNIST / 3D Vision &amp; Robotics Lab / Prof. Kyungdon Joo</b>	07/2024 ~ 02/2025
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## AWARDS

<b>Hanyang University College of Engineering Capstone Fair</b> / Hanyang Univ, ERICA / Gold Prize	12/2024
<b>Intelligent Robot Consortium Creative Comprehensive Design Competition</b> / Hanyang Univ, ERICA / Third Prize	11/2024
<b>Undergraduate Student Paper Awards / ICROS 2024</b>	07/2024
<b>On-campus Creative Comprehensive Design Competition</b> / Hanyang Univ, ERICA / Grand Prize	06/2024
<b>Shared University Robot Production Competition</b> / SHared Ai-Robotics Education / Third Prize	01/2023

## PROJECTS

<b>Development and Research of a Multi-Camera-Based SLAM System / CLOBOT</b>	07/2024 ~ 11/2024
• I researched on stereo visual SLAM system using Adaptive Non-Maximum Suppression(ANMS) algorithm.	

<b>Table Robot System for Complete Restaurant Hall Automation / Hanyang Univ, ERICA</b>	09/2023 ~ 06/2024
• Multi-robots' localization based on the Extended Kalman Filter algorithm using LiDAR and IMU. • Detection and tracking of each robot independently using YOLOv8 for extracting the robot's position from the camera which is on the ceiling.	

<b>2023 Self-Driving Challenge Virtual Track Division / Hyundai Motor Group</b>	05/2023
• I was part of the Perception Team, working on SLAM. • I worked on modifying the ORB-SLAM2 code to a version that fits the latest operating system.	

<b>SRCIRC 2022 Humanoid Sports Division / Seoul National University of Science and Technology</b>	10/2022
• I was responsible for vision processing tasks including recognizing marathon lines and hockey pucks. • I used Specific color detection in HSV space and Canny Edge Detection for my vision task.	

## PATENT

<b>Patent-pending:</b>	
• System and Method for Controlling a Table Robot (Korean Patent Application No. 10-2025-0008102)	01/2025

## SCHOLARSHIPS

<b>National Scholarship:</b>	
• National Excellence Scholarship (Science and Engineering)	2nd semester 2023

<b>University Scholarship:</b>	
• Academic Year 1st Semester Hanyang ERICA Academic Excellence Scholarship	2024
• Academic Year 2nd Semester SHARE Academic Excellence Scholarship I	2023
• Academic Year 2nd Semester Special Academic Excellence Scholarship	2022
• Academic Year 2nd Semester Special Academic Excellence Scholarship	2022

## **SKILLS**

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**Software Tool Skills:** C/C++, Python, ROS2, Git, Docker

### **Certification**

- Computer Specialist in Spreadsheet & Database Level-1

02/2023