Jiyoon Park

Computer Science and Engineering | Robotics | Scientific Computation

email: jypark.jiyoon@gmail.com | web: JiyooonPark.github.io | github: JiyooonPark

Research Interest

My research goal is to **enable robots to do complicated tasks safely and autonomously**.
My research interests are:

- Autonomous and safe robots
- Algorithm optimization
- Deep learning
- Enhancing robot stability while performing tasks with humans

Education

Mar. 2018 - Present | **Ewha Womans University** | Seoul, Korea

Bachelor of Science in Computer Science and Engineering
dual major in Scientific Computation
Early Graduation (Finishing University in 3 years)
Honors: expected **Summa Cum Laude** (expected GPA over 4.0)
GPA 4.14/4.3 Rank: 2/90
CS Major GPA 4.28/4.3

Research Experiences

Feb. 2021 - Present | **Undergraduate Research Intern** | *Ewha Womans University*

- Developing a large-scale robotic drawing system that draws pen drawings on a large arbitrary surface
- Working with KUKA LBR IIWA 7 R800 as the manipulator and Clearpath Robotics Ridgeback as the mobile platform
- My research focuses on path planning and manipulation of the holonomic mobile base Ridgeback
- Won the **Best Undergraduate Research Award** by The Korean Graphics Society

Publications (non-sci)

1. Eunjung Lim, **Jiyoon Park**, Daeun Song, Young J. Kim, “TSP Pen Art using a Mobile Collaborative Robot (extended abstract)", Korea Computer Graphics Society Annual Conference (KCGS), Jul 2021. [website]
2. Jisu Han, **Jiyoon Park**, Chae-won Kim, Sang-soo Park, Hieonn Kim, “Deep Learning Based Autonomous - Driving Cart Using ROS for Computation Offloading” , Korea Information Processing Society Fall Conference (KIPS), Nov 2020.

Teaching Experience

2021 | **Peer Instructor (Tutor)** | Ewha Womans University

Department of Computer Science & Engineering

Tutored Numerical Methods (Computer Science math elective course)

2021 **One-Stop Tutor |** Ewha Womans University, Korea

Department of Computer Science & Engineering

In charge of student's code reviews and answering questions for an advanced algorithm course

Awards

2021, Jul. **Best Undergraduate Paper Award |** Korean Computer Graphics Society

For the abstract paper "TSP Art Using a Mobile Manipulator Robot" [website]

2021, Jun. **Ewha Capstone Design Project Contest** | Ewha Womans University, Korea

2nd out of 28 teams for the "Autonomous Cart Using ROS" capstone project

2020, Dec. **Ewha Startup Contest** | Ewha Womans University, Korea

Came in 1st place for the "Autonomous Cart Using ROS" capstone project

2019, Aug. **Ewha Sharing Story Writing Contest** | Ewha Womans University, Korea

Came in 4th for the short essay "An undefined form of love: share"

Honors and Scholarships

2018 - 2022 **Admission Scholarship** | Ewha Womans University, Korea

Entered university with full funding for 4 years of study for high admission score

2021 **Mentoring Scholarship** | Ewha Womans University, Korea

Worked as a One-Stop tutor specializing in advanced algorithms

2021 **Peer Instructor Scholarship** | Ewha Womans University, Korea

Worked as a Peer Instructor for "Numerical Methods" course

2020 **Honors Scholarship** | Ewha Womans University, Korea

Awarded to students who come in top 2% of the department (rank: 1/516)

2020 **HOKMA Mentoring Scholarship** | Ewha Womans University, Korea

Worked as a mentor to guide newly admitted students choose their majors

2019 **Club Scholarship** | Ewha Womans University, Korea

Funded activity fee for entering debate contests around the nation

Technical Skills

Programming Languages: Python, Java, C/C++, Matlab, HTML/CSS/JS
Robotics Programming: ROS
Robotics Simulator: Gazebo, rviz
Robotics Hardware: Ridgeback Mobile Platform, Turtlebot, KUKA iiwa 7 R800
Language: Native in English and Korean, Good in Japanese
TOEFL 112 (RC 29/ LC 28/ SP 30/ WR 25)