

HyunSeo Jung

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RESEARCH INTERESTS

Robotics, Automation, Control theory, Artificial Intelligence

EDUCATION

Pohang University of Science and Technology (POSTECH) Pohang, South Korea
Bachelor of Science in Mechanical Engineering and Electrical Engineering; GPA: 4.02/4.30 Feb. 2020 – Feb. 2024

- **Thesis:** Development of a Dynamic speed bump using emergency locking retractor mechanism
- **Thesis:** Reinforcement learning based Chip placement automation

Busan Science High School Busan, South Korea
High School Diploma Mar. 2018 – Jan. 2020

PUBLICATIONS

[C1] **H. S. Jung**, J. W. Kim, M. J. Kim, and S. H. Kang, “강화학습 기반 Chip Placement에서의 보상함수 설정 방법”, The 30TH Korean Conference on Semiconductors, 2023

HONORS AND AWARDS

Best Student Award (Dept. of M.E., POSTECH) 2022

- Awarded to a *POSTECH M.E.* student who spent an excellent semester

Haesuk Cultural Scholarship (Haesuk Scholarship Foundation) (₩8,000,000 ≈ \$6,400) 2022-2023

Undergraduate Group Research Program (POSTECH) 2021

- Topic: Development of a lipreading device
- 3rd prize

POSTECH Programming Contest 2021

- 2nd prize

POSTECH Presidential Fellowship (POSTECH) (about ₩40,000,000 ≈ \$32,000) 2020-2024

- Full ride program for undergraduate course

Hanseong Fellowship (Hanseong Sonjaehan Scholarship Foundation) (₩10,000,000 ≈ \$8,000) 2019

- Awarded to academic excellent students

RESEARCH EXPERIENCES

Research Intern (MARCH Lab, POSTECH) Jun. 2023 - Nov. 2023

- Research on balancing control of an unmanned unicycle

Research Intern (MARCH Lab, POSTECH) Jun. 2022 - Aug. 2022

- Research on balancing control of an unmanned bicycle

Freshman Research Intern (Dept. of E.E, POSTECH) Sep. 2020 - Dec. 2020

- Practice PID control using an inverted pendulum and 2-dof helicopter system

Freshman Research Intern (Dept. of M.E, POSTECH) Sep. 2020 - Dec. 2020

- Practice PID control using a segway system

TEACHING EXPERIENCES

- Student Mentoring Program** (Dept. of M.E., POSTECH) 2023
- Served as a tutor to teach Systems Control course
- Teaching Assistant** (K-MOOC) 2021-2022
- Developed course materials and assisted course operation for K-MOOC 'Introduction to quantum physics and computing' lecture
- Seminar Host** (PoApper) 2021
- Served as a mentor for frontend seminar at PoApper, the POSTECH Web/App development group

EXTRACURRICULAR ACTIVITIES & MISCELLANEOUS

- Chief Financial Officer** (Undergraduate Association, POSTECH) 2023
- Student President** (Dept. of M.E., POSTECH) 2022
- President of POSTECH Table Tennis club** 2021-2022
- Member of POSTECH Cheerleading team** 2020-2021

SKILLS

- **Languages:** Korean(native), English(intermediate - TOEIC 920)
- **Hardware:** 3D printer, Lathe, Milling machine, Arduino, Raspberry pi
- **Software:** 🐍(including PyTorch and PyBullet framework), MATLAB, C/C++, CAD(Solidworks & Autodesk Inventor)