

HyunSeo Jung

Department of Mechanical Engineering
Pohang University of Science and Technology
77 Cheongam-ro, Nam-gu,
Pohang 37673, South Korea

(Last updated: 2024.03.24.)
Email: [hsjung02 \[at\] postech.ac.kr](mailto:hsjung02@postech.ac.kr)
Homepage: <http://hsjung02.github.io>
Youtube: <http://youtube.com/@hsjung02/>

RESEARCH INTERESTS

Robotics, Automation, Control theory, Artificial Intelligence

EDUCATION

Pohang University of Science and Technology (POSTECH) Pohang, South Korea
Master of Science in Mechanical Engineering Feb. 2024 – Present

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

POSTECHian Fellowship (POSTECH)(₩3,000,000 ≈ \$2,000) 2024

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(advanced - TOEIC 920, TEPS 454)
- **Hardware:** 3D printer, Lathe, Milling machine, Arduino, Raspberry pi
- **Software:** 🍷(including PyTorch and PyBullet framework), MATLAB, C/C++, CAD(Solidworks & Autodesk Inventor)