

# HyunSeo Jung

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(Last updated: 2024.03.24.)  
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Youtube: <http://youtube.com/@hsjung02/>

## RESEARCH INTERESTS

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Robotics, Automation, Control theory, Artificial Intelligence

## EDUCATION

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<b>Pohang University of Science and Technology (POSTECH)</b> <i>Master of Science in Mechanical Engineering</i>	Pohang, South Korea <i>Feb. 2024 – Present</i>
<b>Pohang University of Science and Technology (POSTECH)</b> <i>Bachelor of Science in Mechanical Engineering and Electrical Engineering; GPA: 4.02/4.30</i>	Pohang, South Korea <i>Feb. 2020 – Feb. 2024</i>
<ul style="list-style-type: none"><li>◦ <b>Thesis:</b> Development of a Dynamic speed bump using emergency locking retractor mechanism</li><li>◦ <b>Thesis:</b> Reinforcement learning based Chip placement automation</li></ul>	
<b>Busan Science High School</b> <i>High School Diploma</i>	Busan, South Korea <i>Mar. 2018 – Jan. 2020</i>

## PUBLICATIONS

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[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

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<b>Best Student Award</b> (Dept. of M.E., POSTECH)	2022
<ul style="list-style-type: none"><li>◦ Awarded to a <i>POSTECH M.E.</i> student who spent an excellent semester</li></ul>	
<b>Haesuk Cultural Scholarship</b> (Haesuk Scholarship Foundation) (₩8,000,000 ≈ \$6,400)	2022-2023
<b>Undergraduate Group Research Program</b> (POSTECH)	2021
<ul style="list-style-type: none"><li>◦ Topic: Development of a lipreading device</li><li>◦ 3rd prize</li></ul>	
<b>POSTECH Programming Contest</b>	2021
<ul style="list-style-type: none"><li>◦ 2nd prize</li></ul>	
<b>POSTECH Presidential Fellowship</b> (POSTECH) (about ₩40,000,000 ≈ \$32,000)	2020-2024
<ul style="list-style-type: none"><li>◦ Full ride program for undergraduate course</li></ul>	
<b>Hanseong Fellowship</b> (Hanseong Sonjaehan Scholarship Foundation) (₩10,000,000 ≈ \$8,000)	2019
<ul style="list-style-type: none"><li>◦ Awarded to academic excellent students</li></ul>	

## RESEARCH EXPERIENCES

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<b>Research Intern</b> (MARCH Lab, POSTECH)	Jun. 2023 - Nov. 2023
<ul style="list-style-type: none"><li>◦ Research on balancing control of an unmanned unicycle</li></ul>	
<b>Research Intern</b> (MARCH Lab, POSTECH)	Jun. 2022 - Aug. 2022
<ul style="list-style-type: none"><li>◦ Research on balancing control of an unmanned bicycle</li></ul>	
<b>Freshman Research Intern</b> (Dept. of E.E, POSTECH)	Sep. 2020 - Dec. 2020
<ul style="list-style-type: none"><li>◦ Practice PID control using an inverted pendulum and 2-dof helicopter system</li></ul>	
<b>Freshman Research Intern</b> (Dept. of M.E, POSTECH)	Sep. 2020 - Dec. 2020
<ul style="list-style-type: none"><li>◦ Practice PID control using a segway system</li></ul>	

## TEACHING EXPERIENCES

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- 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

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- 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

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- **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)