

# JaeSung Ahn

🏠 <https://voyagerahn.github.io>

✉ [voyagerahn@gmail.com](mailto:voyagerahn@gmail.com)

🌐 [github.com/voyagerahn](https://github.com/voyagerahn)

## EDUCATION

---

**Seoul National University of Science and Technology** Mar 2020 – Aug 2022  
B.S. in Mechanical System Design Engineering (*Advisor: Prof. Chibum Lee*)

## EXPERIENCE

---

**Hyundai Motor Company** Uiwang, Korea  
*Research Engineer (Mobile Robotics team, Robotics Lab)* Jan 2023 - Present

- Research and develop dynamic model, control and state estimation algorithm for mobile robots
- Design and implement control software for robot

**Korea Institute of Science and Technology (KIST)** Seoul, Korea  
*Undergraduate Student Researcher (Advisor: Ph.D. Yisoo Lee)* Sep 2021 – Sep 2022

- Developed model predictive control and deep reinforcement learning combined control algorithms for 18DoF quadruped robot

**Republic of Korea Air Force** Pyeongtaek, Korea  
*Military Service* 2015 - 2017

## PUBLICATIONS

---

Jaesung Ahn, Euncheol Im, Yisoo Lee, “Learning Impulse-Reduced Gait for Quadruped Robot using CMA-ES”. In Proceedings of the *IEEE International Conference on Ubiquitous Robots (UR)*, 2023.

## HONORS AND AWARDS

---

**Merit-based Scholarship** 2018 - 2019

**Undergraduate Conference Award** 12/01/2018

**Outstanding Design Award** 01/11/2020

Awarded by The Hong Kong University of Science and Technology (HKUST),  
Sungkyunkwan University (SKKU)

**2021 SRC IRC Intelligent Robot** 10/30/2021

4<sup>th</sup> place, Awarded by Dean of Engineering

## EXTRACURRICULAR ACTIVITIES

---

**Member of Robotics Research Club 'Thot', SeoulTech** 2020

*Undergraduate Student (Advisor: Prof. Donghwan Kim)*

· Designed, fabricated, tested robots(e.g. drones, manipulator)

## PROFESSIONAL TRAINING

---

**Nvidia Certification**, Nvidia Deep Learning Institute 12/02/2021

- Fundamentals of Deep Learning

## TECHNICAL SKILLS

---

### **Programming and Software**

- C99/C++20, Python, Java, R, Matlab, Swift, VHDL
- PyTorch, TensorFlow, ROS (melodic), Ray
- Vim, Git, CMake, Shell Script, Linux/Unix
- NX, OrCAD, ANSYS
- MuJoCo, Raisim, Pybullet

### **Experience with Robots**

- Hyundai motor company MobED
- UnitreeRobotics A1
- KIST Dual Arm robot
- KIST Humanoid Mahru-R (Only simulation)

## REFERENCES

---

**Yisoo Lee**, Ph.D.

*Senior Researcher*

Center for Intelligent and Interactive Robotics

Korea Institute of Science and Technology

Email: yisoo.lee@kist.re.kr

**HunKeon Ko**, Ph.D.

*Team Leader*

Mobile Robotics Team, Robotics Lab

Hyundai Motor Company

Email: hoonhoon@hyundai.com