JaeSung Ahn

- ♠ https://voyagerahn.github.io
- voyagerahn@gmail.com
- github.com/voyagerahn

EDUCATION

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

EXPERIENCE

Hyundai Motor Company, Uiwang, Korea

Research Engineer, Mobile robot team, Robotics LAB

Jan 2023 - Present

HL Mando, Seongnam, Korea

Research Engineer (S/W Campus, Global R&D Center)

• SbW(steer-by-wheel) control logic

Nov 2022 – Dec 2022

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

- Development project : MPC based force control framework
 - Implemented model predictive control(MPC), quadratic programming(QP) based force control framework for 18DoF quadruped robot
- Research project: Learning gait for quadruped robot with evolutionary strategy
 - Researched project that used reinforcement learning to control how robots would move like real animals and react in challenging environments
- Research project: Adaptive impedence control for Humanoid robot
 - Initiated research project that generate adaptive gain of humanoid robot impedence controller using reinforcement learning

Republic of Korea Air Force, Pyeongtaek, Korea *Military Service*

2015 - 2017

HONORS AND AWARDS

Merit-based Scholarship

2018 - 2019

Undergraudate 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

4th place, Awarded by Dean of Engineering

EXTRACURRICULAR ACTIVITIES

Member of Robotics Research Club 'Thot', SeoulTech

Feb 2020 – Feb 2021

Undergraduate Student (Advisor: Prof. Donghwan Kim)

- Designed, fabricated, tested robots(e.g. drones, manipulator)
- Contributed to Deep learning based Bin Picking & Inserting project that used fully convolutional model for real-time image segmentation

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

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