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　　　　　　　　Oct 2023 - Present

Research Engineer, Mobile robot team, Robotics LAB

HL Mando, Seongnam, Korea　　　　　　　　　　　　Nov 2022 – Dec 2022

Engineer (S/W Campus, Global R&D Center)
- SbW(steer-by-wheel) control logic

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　　　　　　2015 - 2017

Military Service

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