Yunho Kim

Updated May 20, 2023

Email: awesomericky@kaist.ac.kr
Personal website: https://awesomericky.github.io/
GitHub: https://github.com/awesomericky
LinkedIn: https://linkedin.com/in/awesomericky
Citizenship: Republic of Korea

Research interests

Legged robotics, Machine learning, Perception-driven locomotion

Education

Korea Advanced Institute of Science and Technology
MS in Mechanical Engineering (Advisor: Jemin Hwangbo) 2022.09 – 2024.02 (Expected)

Seoul National University
BA in Mechanical Engineering (GPA: 3.75/4.3) 2018.03 – 2022.02

Publications

Learning Forward Dynamics Model and Informed Trajectory Sampler for Safe Quadruped Navigation (*RSS 2022*)
Yunho Kim, Chanyoung Kim, Jemin Hwangbo.

Safety Guided Policy Optimization (*IROS 2022*)
Dohyeong Kim, **Yunho Kim**, Kyungjae Lee, Songhwai Oh.

Research experience

CORE Lab (Control, Optimization Research Lab)
Position: Undergraduate researcher 2020.04 – 2020.07
Advisor: Insoon Yang (Seoul National University)
Implemented path tracking and planning algorithm for autonomous RC car navigation using PID control and IT-MPC (Information-Theoretic Model Predictive Control). (Check the result here)

RLLAB (Robot Learning Lab)
Position: Undergraduate researcher 2020.08 – 2021.03
Advisor: Songhwai Oh (Seoul National University)
Conducted research on language based human-robot interaction with the task of Multi-object Detection and Vision Language Navigation. (Check the result here)

INROL (Interactive and Networked Robotics Lab)
Position: Undergraduate researcher 2021.03 – 2021.06
Advisor: Dongjun Lee (Seoul National University)
Conducted research on learning multiple gaits of quadruped robots using hierarchical reinforcement learning. (Check the result here)

RAI LAB (Robotics and Artificial Intelligence Lab)

Position: Student researcher 2021.06 – 2021.09, 2022.01 – 2022.-08
Advisor: Jemin Hwangbo (KAIST)
Conducted research on the safe navigation of quadruped robots in geometrically complex environments using model-based reinforcement learning. (Check the result here)

Industry experience

SAMSUNG C-LAB
Position: Intern 2020.01 – 2020.02
Developed Android application prototype for sensing data and informing user via Bluetooth communication.

Teaching experience

Teaching assistant (Seoul National University)
Course: Core of Computing - Python (Advisor: Jehee Lee) Spring 2021

Skills

Programming
Python, C++

CAD modeling
SOLIDWORKS, SketchUp

Languages
Korean (fluent), English (advanced)

Other experience

Overseas volunteer work 2018.05 – 2019.08
Participated in the overseas volunteer work in Vietnam Binh Dinh three times, thanks to SNUSR volunteer program. We had built rainwater purification system for the citizens and students.

VESS club activity 2018.09 – 2020.02
Participated in VESS (Volunteering Engineers and Scientists in SNU) club activity. We had studied about Appropriate Technology (AT) and done lots of projects to solve social problems in our life.

President of 4th VESS club 2019.03 – 2020.02
Worked as a president of 4th VESS club. Planned and ran club activity for one year with other executives.