Sangbeom Park

sangbeom-park@korea.ac.kr | Personal Hompage | Google Scholar

EDUCATION

Korea University

Seoul, South Korea

M.S. in Artificial Intelligence (Advisor: Sungjoon Choi)

Sep. 2021 - Present

GPA: 4.42/4.5

Leave of absence for Research Internship (Mar 2023 - Sep 2023, Mar 2024 - June 2024)

Dongguk University

Seoul, South Korea

B.S. in Electrical and Electronics Engineering, B.S. in Intelligent Robotics Engineering(Minor) Mar. 2015 – Aug 2021 EE GPA: 4.09/4.5, IR GPA: 4.44/4.5

Leave of absence for Military Service in KATUSA (Nov 2016 - Aug 2018)

PUBLICATIONS

⟨ International ⟩

- [1] **Sangbeom Park**, Taerim Yoon, Joonhyung Lee, Sunghyun Park, and Sungjoon Choi, "Quality-Diversity based Semi-Autonomous Teleoperation using Reinforcement Learning", *Under Review*.
- [2] Joonhyung Lee, **Sangbeom Park**, Yongin Kwon, Jemin Lee, Minwook Ahn, and Sungjoon Choi, "Visual Preference Inference: An Image Sequence-Based Preference Reasoning in Tabletop Object Manipulation", *Under Review*.
- [3] Sunghyun Park, Yoonbyung Chai, Seungyup Ka, Hyeonseong Kim, **Sangbeom Park**, Kevin Gim, Joohyng Kim, and Sungjoon Choi, "Learning Rapid Adaptation of a Legged Robot under Amputation", *Under Review*.
- [4] Joonhyung Lee, **Sangbeom Park**, Jeongeun Park, Kyungjae Lee, and Sungjoon Choi, "SPOTS: Stable Placement of Objects with Reasoning in Semi-Autonomous Teleoperation Systems", 2024 IEEE International Conference on Robotics and Automation (ICRA).
- [5] Jeongeun Park, Seungwon Lim, Joonhyung Lee, **Sangbeom Park**, Minsuk Chang, Yougjae Yu, and Sungjoon Choi, "CLARA: Classifying and Disambiguating User Commands for Reliable Interactive Robotic Agents", *IEEE Robotics and Automation Letters 2023*.
- [6] Sangbeom Park, Yoonbyung Chai, Sunghyun Park, Jeongeun Park, Kyungjae Lee, and Sungjoon Choi, "Semi-Autonomous Teleoperation via Learning Non-Prehensile Manipulation Skills", 2022 IEEE International Conference on Robotics and Automation (ICRA).

Work Experience

Research Intern, NAVER Cloud

Working on Newsbot Service using Hyperclova X

Gyeonggi-do, South Korea MClova Xar. 2024 – June. 2024

Research Intern, NAVER LABS

Working on Robot Manipulation (Mentor: Taeyoon Lee)

Gyeonggi-do, South Korea

Undergraduate Research Intern, KOREA AI&Robotics Lab

Seoul, South Korea

Mar. 2023 - Sep. 2023

Researching on reinforcement learning for robotic manipulation skills (Advisor: Sungjoon Choi) Jan. 2021 - Aug. 2021

Programming Instructor, CMS C3Coding

Seoul, South Korea

Teaching C++ Programming for Korea Olympiad in Informatics (KOI)

May. 2019 - Present

Awards & Honors

Autonomous Driving Competition, 2nd, Dongguk University, 2021.

Honor student for 2021, Dongguk University, 2021.

Honor student for 2020, Dongguk University, 2020.

Poster Idea Award, KICS, 2020.

Capston Design Value Up, 3rd, Dongguk University, 2019.

Project of the Industrial Revolution, 1st, TAVE, 2019.

PROJECTS

Automation Maintenance using Mobile Manipulator

Mar. 2021 –Sep. 2023

- Developed navigation and manipulation skills of mobile manipulator for factory automation system.
- Supported from Samsung Electronics

Deep Reinforcement Learning for Autonomous Driving

Jan. 2021 – April. 2021

- Proposed sampled-efficient reinforcement learning methods for autonomous driving implemented in Unity.
- Open Lab, AI LAB KOREA Association, Inc

Self-driving Framework

Dec. 2020 - Feb. 2021

- Developed a self-driving framework using computer vision and reinforcement learning on Xytron.
- 2nd prize, Dongguk University

User-centered Home IoT

June. 2019 – Sep. 2019

- Developed Home IoT System for Individual User, It uses the face recognition system as a trigger to activate the IoT, which considers user preferences and controls the system utilizing an app equipped with a menu.
- 3rd prize, Dongguk University

Sharella (Sharing Economy+Umbrella)

Mar. 2019 - May. 2019

- Designed and implemented a prototype of Autonomous System "Sharella (Sharing Economy+Umbrella)" based on Firebase to integrate with customized app and Raspberry Pi which controls the hardware. Literally, it serves as a platform to share umbrellas from anywhere to anyone
- 1st prize, TAVE

PATENTS

Semi-Autonomous Teleoperation via Learning Manipulation

2023

• Republic of Korea. 10-2023-0125345

INVITED TALK

Learning X in Physics-based Simulators

Mar 8, 2024

• Cinamon, AI Research

Shared-Autonomy for Robotics

Feb 14. 2023

• NABER LABS, Robot Dynamics&Control

EX-CURRICULAR ACITIVITIES

Deep Learning Seminar

Sep. 2021 - Mar. 2022

- AI-group deep learning seminar
- Attending Korea, Seoul National, Han-Yang, Chung-Ang University PAIR (RILAB, RLLab, Robots with Humans Lab, RAILab) seminar

MST (Microcontroller Study Team Club)

Dec. 2018 - Dec. 2019

- In charge of the seminars for C programming language tutorial for club members
- In charge of the seminars for Arduino and Raspberry Pi tutorial for club members

Languages

Korean (Native), English (Fluent)