

JAEHWI JANG

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EDUCATION

M.S. in Artificial Intelligence, Kim Jaechul Graduate School of AI

Korea Advanced Institute of Science and Technology, Korea

Mar. 2022 – Feb. 2024

Advisor: Prof. [Daehyung Park](#)

GPA: 4.3 / 4.3

B.S. in Mechanical Engineering & Physics, Minor in Computer Science

Korea Advanced Institute of Science and Technology, Korea

Mar. 2014 – Aug. 2021

GPA: 4.01 / 4.3 (Summa Cum Laude)

International Exchange Student in Mechanical Engineering Dept.

Technical University of Munich

Mar. 2017 – Aug. 2017

FELLOWSHIPS, HONORS AND AWARDS

Fulbright U.S.-Korea Presidential STEM Initiative Award

2024 -

KAIST Mechanical Engineering Dept. Best Undergraduate Award.

2022

KAIST Presidential Fellowship

Mar. 2016 – Aug. 2021

Exchange Student Scholarship, \$10,000 funded from KAIST

Mar. 2017 – Aug. 2017

KAIST Dean's list

Sep. 2014

PUBLICATIONS

[J1] **Inverse Constraint Learning and Generalization by Transferable Reward Decomposition**

IEEE Robotics and Automation Letters, 2024

[\[video\]](#) [\[paper\]](#)

Jaehwi Jang, Minjae Song, Daehyung Park

[C1] **SGGNet2: Speech-Scene Graph Grounding Network for Speech-Guided Navigation**,

IEEE International Symposium on Robot and Human Interactive Communication, 2023

[\[paper\]](#)

Dohyun Kim*, Yeseung Kim*, **Jaehwi Jang***, Minjae Song*, Woojin Choi, Daehyung Park

(*Equally contributed)

[W1] **Physics-Informed Gradient Regularization for Inverse Reinforcement Learning**

RSS Workshop on Experiment-oriented Locomotion and Manipulation Research, 2023

Jaehwi Jang, Daehyung Park

RESEARCH EXPERIENCE

Research Assistant

Jul. 2021 – Feb. 2022

Robust Intelligence and Robotics Laboratory, KAIST

Advisor: Prof. Daehyung Park

- Worked on reinforcement learning, inverse reinforcement learning for safe robotic operation
- Explored method for inferring implicit constraints from the demonstration
- Implementing collaborative perception and control modules in ROS for UR5e manipulator

Undergraduate Research Intern*Mar. 2021 – Jun. 2021*

Algorithmic Intelligence Laboratory, KAIST

Advisor: Prof. Jinwoo Shin

- Explored methods to enhance self-supervised representation learning for visual tasks

Undergraduate Research Intern*Dec. 2018 – Feb. 2019*

Computational Intelligence for Software Engineering Lab, KAIST

Advisor: Prof. Shin Yoo

- Explored methods for network pruning with software testing techniques

Research Intern*Jun. 2018 – Aug. 2018*

Netmarble NARC AI Research, Seoul, Korea

- Worked on Object Detection based QA automation for mobile games

Undergraduate Research Intern*Sep. 2017 – Dec. 2017*

Wave energy control Lab, KAIST

Advisor: Prof. Wonju Jeon

- Worked on metamaterial for acoustic cloak with non-zero background flows
- Explored methods for maximizing conformality of metamaterial in Analogue Transformation Acoustic with Prandtl-Glauert transformation

PROJECTS AND EXTRACURRICULAR ACTIVITIES

Auxiliary Police | *Busan Metropolitan Police Agency, (Military Service)**Jul. 2019 – Feb. 2021*

- Worked on Database management at Counter-Terrorism and Auxiliary Police department
- Best auxiliary police commendations from the chief of Busan Metropolitan Police Agency

Autonomous Ball Picking Robot | *KAIST**Mar. 2018 – Jun. 2018*

- Team leader, Design and manufacture of robot locomotive and grasp architecture
- ROS programming for robot actions

KAIST heavy metal band | *KAIST**Mar. 2014 – Dec. 2017*

- Cooperate with international students
- Club leader for 15', Band leader for 16'

Students Academic Seminar | *KAIST Presidential Fellowship program**Jul. 2016 – Dec. 2016*

- Participated in Physics division, Presented a talk on Gravitational Wave

Human Powered Aircraft | *Korea Aerospace Research Institute**Mar. 2013 – Oct. 2013*

- Manufacture of aircraft wings and frames
- Successfully flew across 50 meters

TECHNICAL SKILLS

Languages: Python, C, C++, Matlab, Rust**Libraries:** PyTorch, JAX, Tensorflow, ROS

And huge interest in Mathematics and Physics