TAE MIN KIM

(332) 273 1367 | tk3175@columbia.edu | https://www.linkedin.com/in/tm-kim

EDUCATION

Columbia University   08/2025 - 12/2026
MS in Mechanical Engineering, Robotics and Control

Sogang University   02/2025
B.S. in Mechanical Engineering, Artificial Intelligence   GPA: 3.77/4.3

AREAS OF INTEREST

· Reinforcement Learning
· Robotic in hand manipulation
· Planning

RESEARCH EXPERIENCE

Research Intern, Sogang University, Korea   03/2024 - 06/2025
Robotics and Intelligent Mechanisms lab
· Utilized reinforcement learning algorithms to accomplish dexterous in-hand manipulation tasks within IsaacLab simulations
· Applied teacher–student distillation techniques to achieve comparable performance on real robots

ExploreCSR Workshop, Seoul National University, Korea   07/2023 - 08/2023
Reinforcement Learning Lab
· Designed algorithms for solving environments requiring deep exploration

WORK EXPERIENCE

Hardware Intern, Brookhurst Garage   01/2024 - 02/2024
Startup company specialized in Automatic Drone Control using 3D Visions
· Contributed to the internal structural design of drones to address vibration issues

PROJECTS

Capstone Design Project, Sogang University, Korea   10/2023 - 12/2023
· Led a team of 4 in developing AI-powered healthcare app services

PUBLICATIONS

Domestics
· E. Lee, T. Kim, S. Jeong, "Enhancing the Robustness of Reinforcement Learning Controllers Using a Value Function-Based Disturbance Observer", Korea Robotics Society annual Conference, 2025
· E. Lee, T. Kim, C. Nam, S. Jeong, "Object Grasping with Low-Cost Force Sensors via Reinforcement Learning", Korea Robotics Society annual Conference, 2025

AWARDS

2023 AI Challenge: Machine Learning Force Fields , Samsung, Korea   Oct. 2023
Achieved 12th place out of 141 participating groups

SERVICES

Military Service, Republic of Korea Army   Mar.2020 - Oct.2021
· Fulfilled the mandatory military service in ROK Army
· Currently in military reserve status

SKILLS

Programming Languages
C/C++, Python, MATLAB
Frameworks
Pytorch, TensorFlow, ROS
Others
Dynamixel, Arduino, Form4, Cubicon
Languages
Korean, English