KUKJIN KIM

Blog

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(+82) 10-4746-7510 **(7)** github.com/neverparadise

Seoul, South Korea in kukjin-kim-rl

SUMMARY

I'm interested in Deep Reinforcement Learning and Neural Networks. Currently, I'm working on Multi-Environment Reinforcement Learning for the foundation model of the RL agent. My goal is to develop an agent that can control robots and embedded systems. Furthermore, I want to make them versatile for multiple tasks.

SKILLS

Development: Python, C++, Linux, Git, Docker,

Yocto, CMake, GCP, AWS

RL related:

PyTorch, TorchRL, Tensorflow, Jax,

Ray, RLLib, Unity, Hydra

EDUCATION -

3/2022 - 2/2024 **Korea University** GPA: 4.12/4.3

M.S., Computer Science

SUPERVISOR: PROF. CHANGHEE JOO

3/2016 - 2/2022 **Kyunghee University** GPA: 3.87/4.3

B.S., Industrial Management Systems Engineering and Software Convergence (Double Major)

PUBLICATIONS

W1

Agnostic Architecture for Heterogeneous Multi-Environment Reinforcement Learning

NeurIPS 2023

Foundation Models for Decision Making Workshop

Kukjin Kim, Changhee Joo. [Link]

WORK EXPERIENCE -

2/2024 - Current

LG Electronics, Research Engineer

· Developing an Al-based fault-detection algorithm.

8/2021 - 02/2022 MODULABS, Lecturer

· Taught basics of deep learning, Python, Pytorch, and Tensorflow.

RESEARCH EXPERIENCE -

4/2022 - 12/2023 DIYA Study Group Leader (Do It Yourself AI)

Academic Club

- Studied structured state-space sequence model and Jax. [Link]
- · Studied RL papers and multi-task and meta-reinforcement learning course (CS330)

6/2022 - 8/2022 **MODULABS**

Studied state-of-the-art text-to-speech models. [Link]

3/2020 - 2/2021 Undergraduate Research Student

KYUNGHEE UNIVERSITY SMARTFACTORY LAB (PROF. JUMYUNG UM)

· Researched on reinforcement learning for the robotic gripper.

PROJECTS -

3/2023 - 12/2023 LG Industry-Academia Collaboration Project

Developed an anomaly detection model for the refrigerant compression dataset.

3/2023 - 12/2023 ETRI Satellite Simulation Project

Developed an interactive web application for satellite frequency sharing analysis.

2021

RL Algorithm, Minecraft RL Agent

Implemented A3C Algorithm and Minecraft RL Agent with DQN, ApeX+DQFD [Link]

TEACHING EXPERIENCE

2022 Spring

Teaching Assistant

2023 Fall .

Korea University

· Course: Reinforcement Learning.

2023 Winter

Teaching Assistant

• LG Electronics AI Camp

· Course: Reinforcement Learning.

11/2022

Invited Talk

Korea Atomic Energy Research Institute

Introduction to Reinforcement Learning. [Link]

3/2022 - 8/2022 Lecturer

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Korea University Computer ClubCourse: Python, Deep Learning.

SCHOLARSHIPS -

2023

LG Industry-Academic Scholarship Student

Received scholarships for one year of graduate school,

2016-2022

National Scholarship for Excellence in Science and Technology, KOSAF

Received scholarships for all four years of college