Liangyawei Kuang

Room 1007-24, Research Postgraduate Hub, HKUST, Clear Water Bay, Kowloon, Hong Kong. https://klyw1998.github.io/LiangyaweiKuang/ https://www.deadsecond.com lkuang@connect.ust.hk

Introduction

I am a postgraduate researcher at the Hong Kong University of Science and Technology (HKUST). My research goal is to develop learning algorithms and techniques that could endow machines and systems with greater autonomy and intelligence to acquire the skills for executing complex tasks. I am interested in the intersection of reinforcement learning, decision-theoretic planning, and multi-agent systems. Currently, I focus on solving Multi-Agent Reinforcement Learning problems under scalability and reliability consideration & diving theoretical and algorithmic foundation of Reinforcement Learning.

Research Experience Off-policy Multi-Agent Reinforcement Learning

Apr. 2021 - present

Advisor: Prof. Fangzhen Lin

Heterogeneous Multi-Agent Systems

Dec. 2021 - present

Advisor: Prof. Fangzhen Lin

Education

HKUST, Hong Kong, China

Aug. 2021 - present

Master of Philosophy in Individualized Interdisciplinary Program (Robotics and Au-

tonomous Systems)

Advisor: Prof. Fangzhen Lin

HKUST (Guangzhou), Guangzhou, China

Sept. 2022 - Dec. 2022

Cross Campus Virtual Exchange (Remote)

Northeastern University, MA, U.S.A.

Jul. 2020 - Jun. 2021

Thesis-based Master of Computer Engineering in Computer Vision, Machine Learning and Algorithms (degree discontinued)

University of California, Irvine, CA, U.S.A.

Aug. 2019 - Jun. 2020

Final year visiting in Electrical Engineering & Computer Science Department

Hong Kong Polytechnic University, Hong Kong, China Jan. 2019 - Jun. 2019 One-semester exchange in Mechanical Engineering Department

Harbin Institute of Technology, Harbin, China

Aug. 2016 - Jun. 2020

Bachelor of Engineering in Mechatronics Engineering

Teaching HKUST. Lecturer Spring 2022

Multi-Robot Systems

Course link: https://github.com/klyw1998/Multi-Robot-Systems

Northeastern University, Teaching Assistant

Fall 2020

EECS 7311: Two Dimensional Signal and Image Processing

Skills **Programming**

Libraries

Python, C/C++, MATLAB, R, SQL, Java

NumPy, Matplotlib, Scikit-Learn,

	Languages Others	OpenAl Gym, Py Mandarin, Classical Chinese, English (IELTS: 7) IATEX, Linux, ROS, Docker, V	, ,
Invited Talks	Cooperative Multi-Agent Reinforcement Learning Seminar in Robotics and Autonomous Systems Thrust, System Hub, HKUST(Guangzhou)		
Projects	On-Campus Food Delivery System via Multi-Agent Pathfinding, HKUST Project page: https://github.com/klyw1998/Multi-Agent-Pathfinding		
	Home Credit Default Risk competition at Kaggle, HKUST 2022 Ranked top 14% (Bronze Medal level) based on Machine Learning techniques. This project is carried out by only two participants in less than one week's work! Project page: https://github.com/klyw1998/Statistical-Machine-Learning		
Honours	Meritorious V Outstanding Second Class	Studentship, HKUST Vinner (top 6% in 2019), Mathematical Contest in Student Leader, Harbin Institute of Technology Scholarship, Harbin Institute of Technology ship, Harbin Institute of Technology	2021 - 2023 Modeling 2019 2017 & 2018 2017 & 2018 2017