

Kai-Jie Lin

6F., No. 1, Ln. 68, Xianzheng 8th St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)

☎ (+886) 9-6545-7866 | ✉ linkai0508@gmail.com | 🏠 <https://kjldefeated.github.io/> | 🌐 <https://github.com/KJLdefeated>

Education

National Yang Ming Chiao Tung University

Hsinchu, Taiwan

Senior year of B.S. in Computer Science

Sep. 2021 - Now

- Overall GPA: 3.83/4.0
- Relevant Courses: Algorithm, Graph Theory, Operating System, System Administration, Machine Learning, Deep Learning

University of Illinois Urbana-Champaign

Illinois, USA

Exchange student in Computer Science

Aug. 2024 - Now

- Relevant Courses: System Programming, Applied Parallel Programming, Statistical Reinforcement Learning

Publications

BOFormer: A Generalized Deep Q-Learning Framework for Multi-Objective Bayesian Optimization

ICML AutoRL Workshop, 2024

(Spotlight)

Yu-Heng Hung*, Kai-Jie Lin*, Chien-Yi Wang, Ping-Chun Hsieh (* denotes equal contribution)

- Multi-Objective Bayesian optimization (MOBO) offers an efficient pipeline for optimizing black-box functions.
- Presenting a generalized deep Q-learning framework and propose *BOFormer*, which substantiates this framework for MOBO via sequence modeling.

Experience

NVIDIA - NYCU Advanced Research Project

Hsinchu

Research Assistant

Jul. 2023 - Sep. 2023

- Research Topic: Reinforcement Learning for Bayesian Optimization
- Gaining experience in research and problem solving in the field of reinforcement learning and Bayesian optimization.

Reinforcement Learning and Bandits Lab

Hsinchu

Undergraduate Researcher

Feb. 2023 - Now

- Researching on Reinforcement Learning, Transformers and Bayesian Optimization.

Honors & Awards

Nov. 2022 **Bronze Medal**, 2022 ICPC Asia Taoyuan Regional Programming Contest

Taoyuan, Taiwan

Oct. 2022 **Bronze Medal**, 2023 ICPC Asia Taoyuan Regional Programming Contest

Taoyuan, Taiwan

Oct. 2023 **Bronze Medal**, 2023 Meichu Hackathon Google Group - Android Accessibility

Hsinchu, Taiwan

Projects

Multi-Objective Denoising Diffusion Policy Optimization

Hsinchu, Taiwan

Deep Learning Course Project, [\[Link\]](#)

Jun. 2024

- Fine-tuning diffusion models with multi-objective reinforcement learning from human feedback.

Apply Trajectory Transformer for Quatitative Trading

Hsinchu, Taiwan

Introduction to Artificial Intelligence Course Project, [\[Link\]](#)

May. 2023

- Implementing algorithms such as DQN, DDQN, Policy Gradient and Trajectory Transformer for stock trading.

Cellphone Rating System

Hsinchu, Taiwan

Database Course Project, [\[Link\]](#)

Dec. 2022

- A cellphone rating system to manage the cellphone data and offer users to rate their own cellphone.

Multispeaker Transcription

Hsinchu, Taiwan

Meichu Hackathon Android Accessibility project, [\[Link\]](#)

Oct. 2023

- Deploy large language models Android app that identify the user who is speaking. Transcript the audio and display in the app.

Skills

Programming C/C++, Python, Kotlin, Java

Machine Learning Scikit-learn, Pytorch, Botorch, Large Language Models, Diffusion Models, RLHF

Website/Mobile Django, Android Studio, SQL, AWS, HTML, CSS, JavaScript