ZINIU LI

Address: 2001 Longxiang Road, Shenzhen, China

E-mail: ziniuli@link.cuhk.edu.cn | liziniu1997@gmail.com

Website: www.liziniu.org

EDUCATION

The Chinese University of Hong Kong, Shenzhen, Shenzhen, China   August 2020 - Present
Ph.D., School of Data Science.
Advisor: Zhi-Quan (Tom) Luo.

Xi'an Jiaotong University, Xi'an, China   August 2015 - June 2019
B.E., School of Electrical Engineering.
Advisor: Zhiyuan Liu.

RESEARCH INTERESTS

Reinforcement learning theory, algorithms, and applications.

WORK EXPERIENCE

Tencent, Shenzhen, China   October 2021 - August 2022
Algorithm Engineer (Intern), Advisor: Peilin Zhao

Cardinal Operations, Shanghai, China   June 2020 - August 2020
Software Engineer (Intern)

Nanjing University, Nanjing, China   July 2019 - June 2020
Research Assistant, Advisor: Yang Yu

Tianrang Technology Inc., Hangzhou, China   December 2018 - February 2019
Algorithm Engineer (Intern), Advisor: Zhenhui (Jessie) Li

PUBLICATIONS

* indicates equal contribution.

- **Ziniu Li***, Tian Xu*, Zeyu Qin, Yang Yu, Zhi-Quan Luo. *In Advances in Neural Information Process System 37 (NeurIPS)*, 2023.

  - This paper is selected as an **spotlight** presentation (acceptance rate < 3%) at NeurIPS, 2023.

- Tian Xu*, **Ziniu Li***, Yang Yu, Zhi-Quan Luo. Provably Efficient Adversarial Imitation Learning with Unknown Transitions. *In Proceedings of the 39th Conference on Uncertainty in Artificial Intelligence (UAI)*, 2023.

  - This paper is selected as an **oral** presentation (acceptance rate < 3%) at UAI, 2023.

- **Ziniu Li***, Tian Xu*, Yang Yu, Zhi-Quan Luo. Rethinking ValueDice: Does It Really Improve Performance? *In Proceedings of the 10th International Conference on Learning Representations (ICLR) (Blog Track)*, 2022.

- **Ziniu Li**, Yingru Li, Yushun Zhang, Tong Zhang, Zhi-Quan Luo. HyperDQN: A Randomized Exploration Method for Deep Reinforcement Learning. *In Proceedings of the 10th International Conference on Learning Representations (ICLR)*, 2022.

  - This paper is selected as an **oral** presentation (acceptance rate < 16%) in Workshop on Ecological Theory of Reinforcement Learning at NeurIPS, 2021.

- Tian Xu, **Ziniu Li**, Yang Yu. Error Bounds of Imitating Policies and Environments for Reinforcement Learning. *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2021.

- Tian Xu, **Ziniu Li**, Yang Yu. Error Bounds of Imitating Policies and Environments. *In Advances in Neural Information Process System 34 (NeurIPS)*, 2020.

- **Ziniu Li***, Xiong-Hui Chen*. Efficient Exploration By Novelty-Pursuit. *In Proceedings of the 2nd International Conference on Distributed Artificial Intelligence (DAI)*, 2020.

- Fei-yu Liu, **Ziniu Li**, Chao Qian. Self-Guided Evolution Strategies with Historical Estimated Gradients. *In Proceedings of the 29th International Conference on Joint Artificial Intelligence (IJCAI)*, 2020.

- Xinjian Huang, **Ziniu Li**, Zhiyuan Liu, Bin Xiang, Yingsan Geng, Jianhua Wang. Solving The Inverse Design Problem of Electrical Fuse with Machine Learning. *IEEE Access*, 8 (2020): 74137-74144, 2020.

MANUSCRIPTS

* indicates equal contribution.

- **Ziniu Li**, Ke Xu, Liu Liu, Lanqing Li, Deheng Ye, Peilin Zhao. Deploying Offline Reinforcement Learning with Human Feedback. *arXiv*:2303.07046, 2023.

- Tian Xu*, **Ziniu Li***, Yang Yu, Zhi-Quan Luo. Understanding Adversarial Imitation Learning in Small Sample Regime: A Stage-coupled Analysis. *arXiv*: 2208.01899, 2022.

- **Ziniu Li***, Tian Xu*, Yang Yu. A Note on Target Q-learning For Finite MDPs with a Generative Oracle. *arXiv*: 2203.11489, 2022.

PROJECTS

RLX - Reinforcement Learning Algorithm Codebase   March 2020

Implemented comprehensive cutting-edge deep reinforcement learning algorithms using TensorFlow with easy and convenient interfaces.

Face Recognition System on NVIDIA TX2   June 2018

Developed a facial recognition system capable of detecting strangers in real-time and displaying detection information on the NVIDIA TX2 (Linux platform).

SERVICE

- Organizers: Reinforcement Learning Weekly Seminar, Deep Learning Seminar at CUHKSZ.

- Reviewer: T-PAMI, NeurIPS'2023, ICML'2023, NeurIPS'2022 (Top Reviewer), ICML'2022 (Outstanding Reviewer), ICLR'2022 (Highlighted Reviewer), DAI'2020.

- Technical Program Committee Members: RL4RealLife@NeurIPS2022, DAI'2022.

AWARDS

- Best paper presentation award at the Doctoral and Postdoctoral Forum of Shenzhen Research Institute of Big Data (SRIBD), 2021.

- Honor student of Xi'an Jiaotong University, 2017.

- Second prize of National Electrical Math Modeling Competition, 2017.

- Second prize of Chinese Mathematics Competition, Shaanxi Province, 2016.