Yitao Liu

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EDUCATION

The University of Hong Kong — 9/2021 – 6/2025
BEng in Computer Science — *Hong Kong*
- GPA: 3.78/4.30; HKU Undergraduate Entrance Scholarship for Outstanding Students (full tuition covered, the highest honor for HKU undergraduate students); Dean's Award for Engineering Students (top 10 students faculty-wide)

Princeton University — 1/2024 – 5/2024
Exchange student in Computer Science — *Princeton, United States*
- Selected one student from the Faculty of Engineering, HKU

EXPERIENCES

Princeton University, Department of Computer Science — 1/2024 – 11/2024
Research Assistant — *Advisor: Prof. Karthik Narasimhan*
- Research Keywords: Language Agents (CER), Multimodal LMs (CharXiv)

The University of Hong Kong, Natural Language Processing Group — 6/2023 – 12/2023
Research Assistant — *Advisor: Prof. Tao Yu*
- Research Keywords: Language Agents (OpenAgents, OSWorld); Pretrained Large Language Models (Lemur); Reinforcement Learning (Text2Reward)

PUBLICATIONS

*Equal contribution.

[1] **Yitao Liu***, Tianbao Xie*, Fan Zhou*, Zhoujun Cheng*, Peng Shi*, Luoxuan Weng*, Toh Jing Hua, Junning Zhao, Qian Liu, Che Liu, Leo Z. Liu, Yiheng Xu, Hongjin Su, Dongchan Shin, Caiming Xiong, Tao Yu, **OpenAgents: An Open Platform for Language Agents in the Wild**, Conference on Language Modeling (**COLM**) 2024. [paper] [github] [demo]

[2] **Yitao Liu**, Chenglei Si, Karthik Narasimhan, Shunyu Yao, *Contextual Experience Replay for Continual Learning of Language Agents*, In submission 2024. [paper]

[3] Tianbao Xie*, Siheng Zhao* Chen Henry Wu, **Yitao Liu**, Qian Luo, Victor Zhong, Yanchao Yang, Tao Yu, *Text2Reward: Reward Shaping with Language Models for Reinforcement Learning*, International Conference on Learning Representations (**ICLR**) 2024 Spotlight. [paper] [project] [code]

[4] Zirui Wang, Mengzhou Xia, Luxi He, Howard Chen, **Yitao Liu**, Richard Zhu, Kaiqu Liang, Xindi Wu, Haotian Liu, Sadhika Malladi, Alexis Chevalier, Sanjeev Arora, Danqi Chen, **CharXiv: Charting Gaps in Realistic Chart Understanding in Multimodal LLMs**, The Conference and Workshop on Neural Information Processing Systems (**NeurIPS**) 2024. [website]

[5] Yiheng Xu*, Hongjin Su*, Chen Xing*, Boyu Mi, Qian Liu, Weijia Shi, Binyuan Hui, Fan Zhou, **Yitao Liu**, Tianbao Xie, Zhoujun Cheng, Siheng Zhao, Lingpeng Kong, Bailing Wang, Caiming Xiong, Tao Yu, *Lemur: Harmonizing Natural Language and Code for Language Agents*, International Conference on Learning Representations (**ICLR**) 2024 Spotlight. [paper] [code] [model]

[6] Tianbao Xie, Danyang Zhang, Jixuan Chen, Xiaochuan Li, Siheng Zhao, Ruisheng Cao, Toh Jing Hua, Zhoujun Cheng, Dongchan Shin, Fangyu Lei, **Yitao Liu**, Yiheng Xu, Shuyan Zhou, Silvio Savarese, Caiming Xiong, Victor Zhong, Tao Yu, *OSWorld: Benchmarking Multimodal Agents for Open-Ended Tasks in Real Computer Environments*, Neural Information Processing Systems (**NeurIPS**) 2024. [paper] [project] [code]

PROJECTS

OpenAgents: An Open Platform for Language Agents in the Wild

- ○ **4k** stars on Github
- ○ **Core contributor**

Official Website and App of RIC CSSAUD, HKU
- ○ **4k+** users
- ○ Full-stack engineer

HONORS

HKU Undergraduate Entrance Scholarship for Outstanding Students *(full tuition covered, the highest honor for HKU undergraduate students)*   2021-2025

Dean's Award for Engineering Students *(top 10 students faculty-wide)*   2021-2022

Dean's Honors List *(top 10% students faculty-wide)*   2021-2022

HKSAR Government Scholarship Fund - Reaching Out Award *(1 student faculty-wide)*   2024

SKILLS

Programming	Python (PyTorch), C/C++, Bash, LaTeX, Java, Javascript, Go, MatLab
Tools & Software	Git, CMake
Languages	English (TOEFL: 104), Mandarin (native)