Yaowen Ye (Elwin, 叶耀文)

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RESEARCH INTEREST

I aim to develop responsible and aligned AI that follows human values and interests rather than bringing adverse consequences. Related topics include human-AI collaboration, learning human preferences, red-teaming LLMs, scalable oversight, etc. I am also interested in advancing conceptual research for aligning future super-human intelligence.

EDUCATION

The Affiliated High School of South China Normal University

2018.09-2021.6

Major in mathematics, physics, biology, Chinese, English, and politics

The University of Hong Kong

2021.09-present

Bachelor of Engineering in Computer Science (GPA: 4.09/4.3)

Machine Learning, Probability and Statistics, Stochastic Processes, Data Structures and Algorithms, etc.

RESEARCH EXPERIENCES

Research internship at **Yao's Lab** at UNC-Chapel Hill

2023.10-2023.12

Supervised by Dr. Huaxiu Yao. I worked on a project studying the tradeoff of safety alignment in language models and developing alignment techniques that leverage model reasoning capability to reduce over-safety side effects and achieve better balance.

Research internship at CoRe Lab at Peking University

2023.06-2023.09

Supervised by Dr. Yixin Zhu. I worked on a project investigating the heuristic and simulation modes of humans' and deep learning models' physical reasoning. We proposed a new framework that conceptualizes intuitive physics as a dual process. I also studied other cognitive reasoning research topics, including abductive reasoning and concept learning.

Research internship at **Data Intelligence Lab** at HKU

2021.12-2023.06

Supervisor: Dr. Chao Huang. I worked on projects that leverage generative self-supervised learning to address the data noise and sparsity issues in recommender systems, reducing the performance bias for newly arriving users.

PUBLICATIONS

"Graph Masked Autoencoder for Sequential Recommendation"

SIGIR'23

The 46th International ACM SIGIR Conference on Research and Development in Information Retrieval Yaowen Ye, Chao Huang, and Lianghao Xia.

"Masked Graph Transformer for Recommendation"

SIGIR'23

The 46th International ACM SIGIR Conference on Research and Development in Information Retrieval Chaoliu Li, Chao Huang, Lianghao Xia, Xubin Ren, Yaowen Ye, and Yong Xu.

LEADERSHIP

Co-founder of HKU AI4Good Association

present

A student interest group focused on undergraduate AI research, AI safety, and alignment. Activities include research seminars, paper reading groups, research mentorship programs,

and invited talks from Ph.D.'s and professors in related fields.

Co-leader of HKU Astar (former HerKules Robomaster-AI) Team 2022-2023 A team focused on RoboMaster competitions. I led the vision team and did technical work for (1) Auto-aiming: Designing algorithms to detect enemy robots and control the gun to attack. (2) Localization: Locating robots in the point cloud space with RGBD cameras. Captain of Lee Shau Kee Hall Choir 2022-2023 A cultural team at HKU Lee Shau Kee Hall. I led the LSK Choir throughout the year, organized weekly practice, and successfully participated in the 2023 Interhall Choir Competition. **AWARDS** Silver Award 2022.10 The 1st EEG & AI Competition organized by the Faculty of Education of HKU (HK\$ 2,000) Young Tsun Dart Scholarship 2022-23 Merit-based Scholarship for students in HKU Engineering faculty (HK\$ 15,000) **Noel Chau Scholarship** 2021-22 Merit-based Scholarship for HKU students (HK\$ 20,000) **Dean's Honours List** 2021-22 Merit-based Award for students in HKU Engineering faculty Ho Fook and Chan Kai Ming Prize 2021-22 Scholarship awarded by HKU (HK\$ 5,000) **Outstanding Student of the Year** 2019.12 Science Talent Program jointly organized by China Association for Science & Technology and the Ministry of Education of the PRC **Outstanding Student** 2019.08 Tsinghua University Global Innovation Exchange Summer Camp **First Prize** 2018.01 National Olympiad in Informatics in Guangdong province organized by CCF **ACTIVITIES** Talk on Machine Learning Introduction at Dong Yuan High School, Guangdong 2022.06 HKU BrainStem invited sharing on research experience 2023.02 Serve as a reviewer for BrainStem Scientific Journal 2023.08 CSSAUD invited sharing on pursuing undergraduate research 2023.09

SKILLS

Python, C++, Haskell, R; Data structures and algorithms;

Machine Learning and Deep Learning; PyTorch and TensorFlow.

Adobe Photoshop, Final Cut Pro, Microsoft Office.