EDUCATION

•Bachelor of Engineering in AI: Systems & Technology

Sept 2021 - May 2025(Expected)

The Chinese University of Hong Kong

CGPA: 3.644

- Dean's List 2021-2022
- Dean's List 2023-2024
- ELITE Stream Scholarship 2022-2023
- Relevent Coursework: Fundamentals of Machine Learning, Introduction to Computer Systems, Distributed and Parallel Computing, Foundations of Optimization, Foundation of Applied Deep Learning.

Personal Projects

•OASIS Nov 2022 - Feb 2023

A metamorphic testing framework to validate content moderation software, focusing on toxic images.

- Conducted a preliminary study on over 5,000 real-world image messages and summarised over 20 image transform rules to hide toxic content.
- Designed a comprehensive testing framework for textual toxic content spread via images, whose results can effort-lessly evade software moderation.

•Semantic Fusion: DUO

Jul - Nov 2022

A practical content moderation software testing tool that helps to improve software moderation ability.

- Developed a general, effective methodology and tool for testing multimedia content moderation software.
- Successfully attacked 7 popular softwares through 1,200 pieces of data, measurably indicating their weaknesses in multimedia content moderation.

EXPERIENCE

•UG Summer Research Internship

Jun - Aug 2023

The Chinese University of Hong Kong, Hong Kong

Offline

- Project Name: Multilingual Safety of Large Language Model
- Built a multilingual safety benchmark containing more than 26,000 pieces of data and 10 different languages for testing large language models' multilingual safety ability.

•UG Summer Research Internship

Jun - Aug 2024

The Chinese University of Hong Kong, Hong Kong

Offline

- Project Title: Automatically Detecting Audio-Visual Inconsistencies in 3D Software Systems
- Propose an automatic tool to detect audio and video inconsistencies in software, which utilizes LMMs and LLMs to extract information and analysis.

TECHNICAL SKILLS

Programming Languages: C, Python, Java, Javascript, HTML, CSS, PHP Libraries: Python Libraries(Pandas, PyTorch, NumPy, etc.), OpenMP, cuda

PUBLICATIONS

•All Languages Matter: On the Multilingual Safety of LLMs

Wang, Wenxuan, Zhaopeng Tu, Chang Chen, Youliang Yuan, Jen-tse Hung, Wenxiang Jiao, and Michael Lyu

The 62nd Annual Meeting of the Association for Computational Linguistics, 2024

•Validating Multimedia Content Moderation Software via Semantic Fusion

Wang, Wenxuan, Jingyuan Huang, Chang Chen, Jiazhen Gu, Jianping Zhang, Weibin Wu, Pinjia He, and Michael Lvu

Proceedings of the 32nd ACM SIGSOFT International Symposium on Software Testing and Analysis, 2023

•An Image is Worth a Thousand Toxic Words: A Metamorphic Testing Framework for Content Moderation Software

Wang, Wenxuan, Jingyuan Huang, Jen-tse Huang, Chang Chen, Jiazhen Gu, Pinjia He, and Michael R Lyu

2023 38th IEEE/ACM International Conference on Automated Software Engineering (ASE), 2023