

ZHAO, Sihang

Dangdai International Garden, Block 3, F-2-602, 430223 | sihangzhao@cuhk.edu.cn | Tel: (+86)15927429019

EDUCATION

The Chinese University of HongKong, Shenzhen <i>MPhil in Computer and Information Engineering</i> , Supervised by Prof. Pinjia He	Shenzhen, China Jan. 2023- Present
Imperial College London <i>MSc in Applied Computational Science and Engineering</i> , with Merit	London, UK Oct. 2021- Oct. 2022
University of California, Davis <i>Exchange Programme</i> , with Overall GPA 3.92	Davis, California Sept. 2020- June 2021
Wuhan University of Technology <i>BEng in Computer Science and Technology</i> , with Overall GPA 3.83	Wuhan, China Sept. 2017- June 2021

RESEARCH INTEREST

- Human-computer interaction (Accessibility Design)
- Software Engineering (Human Aspect)
- AI Security & Ethics (Bias, Robustness for Neurodiversity)

ONGOING PAPERS

- Sihang Zhao, Shoucong Xiong, Bo Pang, Xiaoying Tang, Yuhang Zhao, Pinjia He. **Let AI Read First: Enhancing Reading Abilities for Individuals with Dyslexia through Artificial Intelligence**. Plan to submit to the 2025 Conference on Human Factors in Computing Systems, Yokohama, Japan (CHI 2025).
- Sihang Zhao, Youliang Yuan, Xiaoying Tang, Pinjia He. **Difficult Task Yes but Simple Task No: Unveiling the Laziness in Multimodal LLMs**. Submitted to the 2024 Conference on Empirical Methods in Natural Language Processing, Miami, Florida (EMNLP 2024).

RESEARCH EXPERIENCE

Unveiling the Laziness in Multimodal-LLMs <i>MPhil Researcher</i>	The Chinese University of Hong Kong, Shenzhen Feb. 2024 - Present
<ul style="list-style-type: none">• Reveal the phenomenon of Multimodal-LLMs' laziness, offering an insightful explanation for why models perform poorly on many straight-forward visual question tasks.• Constructed Lazybench, a benchmark to evaluate MLLMs laziness. Based on this, we found current MLLMs suffer from laziness.• Made a comprehensive study in existing benchmarks by Dobby a tool that can expand existing VQA dataset and automatically evaluate the extent of MLLMs laziness.	
Misinformation about ADHD on Social Media <i>Remote Research Assistant</i>	University of Wisconsin–Madison Feb. 2024 – Present
<ul style="list-style-type: none">• Qualitative study about the ADHD-related information presented on Youtube and TikTok• Qualitative study about the consumers of ADHD-related content perceive/interpret different types of information on these two platforms	
LARF: Let AI Read First <i>MPhil Researcher</i>	The Chinese University of Hong Kong, Shenzhen Dec. 2022 - Sept. 2023
<ul style="list-style-type: none">• Proposed LARF, an AI-based presentation method and a software application demo that enhances text readability for dyslexic individuals.• Comprehensive randomized controlled trials to empirically evaluate the effectiveness of LARF, which involved both dyslexic and typical readers, providing a broad and diverse assessment base.• Provided insights for the HCI community and accessibility designers focusing on individuals with dyslexia and other related neurodiversity populations: future work and research can concentrate on a series of tasks involving the use of AI and language models for text annotation and presentation.	
Automated Crater Detection and Classification with Machine Learning <i>MSC Final Research Project</i>	Imperial College London April 2022 - Sept. 2022
<ul style="list-style-type: none">• Designed and implemented the <i>Metamorphic Crater Generator (MCG)</i>, a generation algorithm for crater-images.• Proposed a Crater Detection Algorithm test method and a training iteration strategy based on MCG• Applied MCG as data augmentation method. On YOLO V5, the recall rate increased by 3% and the mAP 0.5 increased by 2% tested on the dataset provided by Benedix et al.• The model trained under the MCG - augmentation iteration strategy achieved 7% more recall rate on craters of 1.5~10 km diam and 6% more recall rate on craters smaller than 1.5 km on the same dataset.	

AWARDS

Academic Excellent Awards in UC, Davis	June 2021
Third-class Scholarship of Wuhan University of Technology	Nov. 2020
Merit Student of Wuhan University of Technology	Nov. 2020
Excellence Award for 21 st East China Cup Mathematical Modelling Competition	May 2019
Second Prize in Chinese High School Mathematics Competition	Sept. 2016

PROGRAMMING SKILLS

Python: Data visualization, Scientific computing, Machine learning
C++: Object-oriented programming **Java:** Programmed games (e.g., Minesweeper, Maze and Match It)