Pengqi "Eric" WANG

Education

The Hong Kong University of Science and Technology

 $Sep\ 2023-Jul\ 2025$

M. Phil. in Computational Media and Arts, Guangzhou campus

(Expected)

- o GPA: 4.06 / 4.3
- o Cognate: Human Computer Interaction
- o Thesis Topic: Enhancing Children's Reading Engagement through Multi-Modal Interactive AI Agent
- o Advisor: Prof. Mingming FAN (Primary), Prof. Muzhi ZHOU (Co)
- \circ **Awards:** Postgraduate Studentship (1,426 USD per month); Postgraduate Research Funding & Travel Grant

Hong Kong Baptist University

Sep 2019 - Jun 2023

B. B. A. (Honours) in e-Business Management and Information Systems (First Class), with minor in Computer Science and Technology, BNU-HKBU UIC campus

- \circ GPA: 3.66 / 4.0 (Ranking top 5%)
- Thesis Topic: Comp. Study of Tree-Based & Transformer-based Models for Fake Rev. Detection on Yelp
- Advisor: Prof. May Ying WANG (Academic), Prof. Don Junyi CHAI (Final Year Project, Mentor)
- o Awards: First-Class Scholarship (2019-2020), Second-Class Scholarship (2020-2021, 2021-2022, 2022-2023)

Research Interest

Human-AI Collaboration, Educational Technology, Technology for Social Good, Computer-Supported Cooperative Work (CSCW), Assistive Technology, Healthcare, etc.

Publications

- [1] **Pengqi Wang**, Mingqing Xu, Li Feng and Mingming Fan*. 2025. Understanding and Facilitating Learning with AI in Multi-Source Information Environment for College Students. Submitted to *ACM CHI Conf. on Human Factors in Computing Systems* (CHI '25). Under review. paper
- [2] Qianjie Wei, Jingling Zhang, **Pengqi Wang**, Xiaofu Jin and Mingming Fan*. 2024. Augmented Library: Toward Enriching Physical Library Experience Using HMD-Based Augmented Reality. In *Proc.* 17th Int. Symp. Visual Information Communication and Interaction (VINCI '24). arxiv
- [3] May Ying Wang, Bingjie Deng* and **Pengqi Wang***. 2024. From Hallucination to Trust: Leveraging Chain-of-Thoughts and Empathy in LLM-Empowered Agent. In *Proc. 24th Int. Conf. Electronic Business (ICEB* '24). paper
- [4] May Ying Wang, Na Jiang, **Pengqi Wang** and Bingqing Xiong. 2024. Enhancing Well-Being and Reliance on AIGC-Powered Digital Assistants. In 2024 UNNC-CNAIS Paper Development Workshop.
- [5] May Ying Wang and **Pengqi Wang***. 2024. Decoding Business Applications of Generative AI: A Bibliometric Analysis and Text Mining Approach. In *Proc. 23rd Int. Conf. Electronic Business (ICEB '23')*. paper
- [6] Pengqi Wang, Yue Lin and Junyi Chai*. 2023. Unmasking Deception: A Comparative Study of Tree-Based and Transformer-based Models for Fake Review Detection on Yelp. In Proc. IEEE Int. Conf. Systems, Man, and Cybernetics (SMC '23). paper
- [7] **Pengqi Wang**, Mengli Yu and Yadong Liu*. 2022. Assessing the Content Topics of the Educational Videos on Tik Tok for Science Communication. In *Proc. Int. Seminar on Education, Management and Social Sciences (ISEMSS '22)*. paper

Selected Research Experiences

Research Student Sep 2023 – Present

Accessible & Pervasive User EXperience (APEX) Lab, HKUST (Supervised by Prof. Mingming FAN)

- Understanding and Facilitating Learning with AI in Multi-Source Information Environment for College Students
 - Led qualitative research understanding and designing AI-powered tools to support college students in multi-source information environments, revealed a framework of students' multi-source information behaviors, provided design implications for enhancing AI-assisted academic tools.

- Conducted focus group study sessions and participatory design workshops, analyzed the data using inductive and deductive analysis to generate actionable insights, and authored the manuscript.

o Augmented Library: Toward Enriching Physical Library Experience Using HMD-Based AR

Designed, developed, and evaluated an HMD-based AR system, Augmented Library, to revitalize physical library experiences by integrating interactive digital features that enhance book discovery and community engagement for college students.

• Exploring the Design of AI-mediated Emotion Communication for Deaf and Hard of Hearing People in Online Meetings

- Designed, developed, and implemented an AI-driven emotion support system for Deaf and Hard of Hearing (DHH) participants in online meetings via detecting, interpreting, and visualizing emotional states in real-time, addressing the unique emotional challenges faced by DHH users in virtual environments.
- Worked collaboratively with DHH community and planned user evaluations to assess its effectiveness in improving participation and reducing social isolation.

• Investigating the Role of AI in the Team Synchronous-Asynchronous Collaboration Loop

- Proposed and developed an AI-assisted collaborative ideation system to enhance team collaboration across synchronous and asynchronous modes, with a focus on improving idea comprehension and evolution in group ideation processes. Prepared and conducted user evaluations to assess the effectiveness of AI-assisted features in collaborative environments.

Research Assistant

May 2023 - Sep 2023

Faculty of Business and Management, HKBU-UIC (Supervised by Prof. May Ying WANG)

o From Hallucination to Trust: Leveraging CoT and Empathy in LLM-Empowered Agent

- Explored how Chain-of-Thought reasoning and empathy expressions can enhance user experience with LLMs in critical interaction scenarios, specifically hallucination and service failure, contributing to the development of trustworthy and user-centric AI systems.
- Developed an AI-powered conversational agent based on LobeHub framework for field study experiment, prepared the questionnaire, and authored the manuscript.

• Enhancing Well-Being and Reliance on AIGC-Powered Digital Assistants

- Investigated the impact of explainability signals and dialogue strategies on user well-being and reliance on AIGC-powered digital assistants, aiming to refine their design and enhance user satisfaction.
- Designed experiments, developed systems, and presented the working paper at the 2024 UNNC-CNAIS
 Paper Development Workshop, gathering valuable insights from conference mentor Atreyi Kankanhalli for future research directions.

Professional Experiences

Data Analyst Intern

Jul 2022 - Nov 2022

eBay Inc. @ Top Seller Account Management Team

Analyzed and visualized data using **SQL**, **Python**, **R**, **Excel VBA**, and **Tableau** to create interactive dashboards that trended key business indicators, supported data analysis for marketing growth by 40%, and enhanced decision-making for 1k+ top sellers.

Information Systems Intern

Jun 2022 - Jul 2022

Kingdee International Software Group @ Kingdee China Shared Service Center

Maintained and optimized major info. sys. (ERP, CRM, KBC), processed over 100 issues by providing remote **SQL** and **Python** support, and enhanced the efficiency of Intelligent Approval System by 20%.

References

Prof. Mingming FAN

mingmingfan@ust.hk

Assistant Professor in Computational Media and Arts and Internet of Things at HKUST (Guangzhou);

Assistant Professor in Division of Integrative Systems and Design and Dept. of Computer Science and Engineering at HKUST.

Prof. May Ying WANG

ywang@uic.edu.cn

Associate Professor, Programme Director, Faculty of Business and Management, Beijing Normal University-Hong Kong Baptist University United International College.