PENGQI "ERIC" WANG

The Hong Kong University of Science and Technology (Guangzhou) pwang294@connect.hkust-gz.edu.cn | ericwangpq.github.io

EDUCATION

The Hong Kong University of Science and Technology

Sep 2023 - Jul 2025 (Expected)

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

- GPA 4.06 / 4.3

- Cognate Human Computer Interaction

- Thesis Topic Enhancing Children's Reading Engagement through Multi-Modal Interactive AI Agent

- Advisor Prof. Mingming FAN (Primary), Prof. Muzhi ZHOU (Co)

- Awards Postgraduate Studentship; 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

- GPA 3.66 / 4.0 (Ranking top 5%)

- Thesis Topic A Comparative Study of Tree-Based and Transformer-based Models for Fake Review Detection on Yelp [a6]

- Advisor Prof. May Ying WANG (Academic), Prof. Don Junyi CHAI (Final Year Project, Mentor)

- Awards First-Class Scholarship (2019-2020), Second-Class Scholarship (2020-2021, 2021-2022, 2022-2023)

RESEARCH INTEREST

Human-AI Collaboration, Educational Technology, Electronic Business, Computer-Supported Cooperative Work, Assistive Technology, Healthcare, etc.

PUBLICATIONS

C. Peer-Reviewed Conference Papers & Presentations

- C1. Wei, Q., Zhang, J., Wang, P., Jin, X., Fan, M.*(2024). "Augmented Library: Toward Enriching Physical Library Experience Using HMD-Based Augmented Reality", *The 17th International Symposium on Visual Information Communication and Interaction (VINCI 2024)*.
- C2. Wang, M., Deng, B.*, **Wang, P.** (2024). "From Hallucination to Trust: Leveraging Chain-of-Thoughts and Empathy in LLM-Empowered Agent", *The 24rd International Conference on Electronic Business (ICEB 2024)*.
- C3. Wang, M.*, Jiang, N., Wang, P., Xiong, B. (2024). "Enhancing Well-Being and Reliance on AIGC-Powered Digital Assistants", 2024 UNNC-CNAIS Paper Development Workshop. (Conference Mentor: Atreyi Kankanhalli)
- C4. Wang, M.*, Wang, P. Chen. X. (2024). "Customer Perceptions and Experiences Regarding Information Retrieval Using Generative AI and Search Engines: A Comparative Analysis", *Asia Pacific Marketing Academy Annual (APMA 2024)*.
- C5. Wang, M. Wang P.* (2023). "Decoding Business Applications of Generative AI: A Bibliometric Analysis and Text Mining Approach", *The 23rd International Conference on Electronic Business (ICEB 2023)*.
- C6. Wang, P. Lin, Y., Chai J.* (2023). "Unmasking Deception: A Comparative Study of Tree-Based and Transformer-based Models for Fake Review Detection on Yelp", *IEEE International Conference on Systems, Man, and Cybernetics (SMC 2023)*.
- C7. Wang, M.*, Wang P. (2023). "Generative AI in Marketing: A New Era of Innovation and Opportunity", *Asia Pacific Marketing Academy Annual (APMA 2023)*.
- C8. Wang, P., Yu, M., Liu, Y.* (2022). "Assessing the Content Topics of the Educational Videos on Tik Tok for Science Communication". *International Seminar on Education, Management and Social Sciences (ISEMSS 2022)*.

M. Under-Review Manuscripts

M1. Wang, P., Xu, M., Feng, L., Fan, M. (2025). "Understanding and Facilitating Learning with AI in Multi-Source Information Environment for College Students", Submitted to ACM CHI Conference on Human Factors in Computing Systems (CHI '25).

P. Paper in Progress

- P1. Wang, M., Jiang, N., Wang, P. "Enhancing Well-Being and Reliance on AIGC-Powered Digital Assistants: The Role of Explainability and Conversational Strategies"
- P2. Feng, L., Shi, Q., Xu, M., Wang, P., Fan, M. "Investigating the Role of AI in the Team Synchronous-Asynchronous Collaboration Loop"
- P3. Cao, B., **Wang**, **P**, Wei, Q. "Exploring the Design of AI-mediated Emotion Communication for Deaf and Hard of Hearing People in Online Meetings"

SELECTED RESEARCH PROJECTS

[M1] Understanding and Facilitating Learning with AI in Multi-Source Information Environment for College Students

Jun 2024 - Sep 2024

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

- 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.

[C1] Augmented Library: Toward Enriching Physical Library Experience Using HMD-Based AR
Supervised by Prof. Mingming FAN @ Accessible & Pervasive User EXperience (APEX) Lab, HKUST

- 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.

[C2] From Hallucination to Trust: Leveraging CoT and Empathy in LLM-Empowered Agent

Mar 2024 - Jun 2024

- Supervised by Dr. May Ying WANG (HKBU-UIC) & Dr. Amber Bingjie DENG (XJT-LiverpoolU)
- 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.

[P2] Investigating the Role of AI in the Team Synchronous-Asynchronous Collaboration Loop Mar 2024 - Present Supervised by Prof. Mingming FAN @ Accessible & Pervasive User EXperience (APEX) Lab, HKUST. (Work in Progress)

- 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.

[P3] Exploring the Design of AI-mediated Emotion Communication for Deaf and Hard of Hearing People in Online Meetings

Feb 2024 - Present

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

- 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.

[C3] Enhancing Well-Being and Reliance on AIGC-Powered Digital Assistants

Feb 2024 – Jun 2024

Supervised by **Dr. May Ying WANG & Dr. Na JIANG** (HKBU-UIC)

- 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.

[C3] A Comparative Study of Tree-Based and Transformer-based Models for Fake Review Detection Jan 2023 - Jun 2023 Supervised by **Dr. Don Junyi CHAI** (IEEE Member, HKBU-UIC)

- Spearheaded an investigation comparing traditional tree-based models (Random Forest, XGBoost) with state-of-the-art transformer-based models (BERT, GPT-3) for fake online review detection in e-commerce context. Analyzed the effectiveness of textual features, sampling methods, and overall detection performance using a large-scale dataset.
- Implemented and evaluated multiple ML approaches, including feature engineering, balanced sampling techniques, and model training.

PROFESSIONAL EXPERIENCES

eBay Inc. Data Analyst Intern @ Top Seller Account Management Team, SZ Branch

Jul 2022 - Nov 2022

Kingdee International Software Group

Jun 2022 - Jul 2022

Information Systems Intern @ Kingdee China Shared Service Center

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.

Dr. 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.