

XU ZHENGTAO

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EDUCATION BACKGROUND

School of Computing, National University of Singapore Jan 2025 - Present

PhD in Computer Science (Advisor: Prof. Yi-Chieh (EJ) Lee)

- Research Direction: Human-Computer/AI Interaction, AI for Education, Interactive System Design
- Research Focus: 1. Understanding human behavior when using AI/computer systems 2. Building AI tools to help human better comprehend the world and bring benefits

School of Computing, National University of Singapore Aug 2023 - Dec 2024

Master of Computing (AI Specialisation)

- GPA: 4.67/5.0
- Main Courses: Uncertainty Modelling In AI (A), Algorithmic Mechanism Design (A), Knowledge Discovery and Data Mining (A), Advanced Topics in Human-computer Interaction (A-)

Chu Kochen Honors College, Zhejiang University Sep 2019 - Jun 2023

Bachelor of Engineering in Computer Science and Technology

- GPA: 3.79/4.0, 87.29/100
- Ranking: Top 5% among 226 students
- Honors and Awards: First Class Scholarship, Outstanding Student for three consecutive years

RESEARCH & PROJECTS

Learning with Chatbot through "Learning by Explaining" Dec 2024 - Present

Advisor: Prof. Yi-Chieh Lee, Prof. Tony Tang

- Explore human learners' perceptions and preferences when learning with different role-based chatbots—"Learner," "Peer," and "Challenger"—using the "learning by explaining" method
- This work is planned to be submitted to CHI 2026

AI Tool for HR in Real-time Interview Feb 2025 - Present

Advisor: Prof. Yi-Chieh Lee

- Collaborate with Avature to research the current issues HR faces in real-time interviews and propose a tool to help them conduct interviews more effectively, objectively and systematically
- This work is planned to be submitted to CHI 2026

Uncertainty in AI-assisted Decision Making Nov 2023 - Jun 2024

(Master's Dissertation) Advisor: Prof. Yi-Chieh Lee

- Designed a study to explore how different levels of natural language uncertainty in large language models, like GPT-4, impact user interactions with AI during decision-making
- Recruited 156 participants for a between-condition study to investigate the impact on user trust, satisfaction, and performance during human-AI collaboration
- This work was accepted by International Journal of Human-Computer Studies (IF: 5.3)

Unbounded Scene Representation based on NeRF Sep 2022 - May 2023

(Undergraduate Thesis) Advisor: Prof. Tianjia Shao

- Wrote a literature review on neural radiance fields to explore research directions and reproduced the results of the classical NeRF paper
- Conducted a research related to Mip-NeRF 360, expected to be applied to unbounded large-scale scene reconstruction

PUBLICATION

- Xu, Z., Song, T., & Lee, Y. C. (2025). Confronting verbalized uncertainty: Understanding how LLM's verbalized uncertainty influences users in AI-assisted decision-making. *International Journal of Human-Computer Studies*, 103455.
- Peng, L., Qian, J., Xu, Z., Xin, Y., & Guo, L. (2023). Multi-label hashing for dependency relations among multiple objectives. *IEEE Transactions on Image Processing*, 32, 1759-1773.

INTERNSHIP

AI Algorithm Intern

Dec 2022 - Apr 2023

ZAOWUYUN Inc.

- Developed algorithms for virtualizing real objects using the NeRF method, contributing online 3D marketing design tool for users
- Provided technical support for exploring AI-generated 3D modelling algorithms, including ROCA, RfDNet, and Scan2CAD, and conducted sample testing
- Cooperated team members of Zhejiang University IABC Lab in jointly developing a big data-driven design engine, including intelligent design systems, intelligent interaction systems, digital business and services, and digital cultural creativity

OTHERS

- Teaching: CP2107 Independent Introduction to CS Research (Odyssey)
- Computer skills: C/C++, Python, MATLAB, SQL, LaTeX, Arduino, Shell, Verilog, Java, JavaScript, LabVIEW, assembly language
- Languages: Mandarin (native), English (TOEFL: 100, GRE: 328+4.0)
- Interests: Fitness, Soccer, Esports