

EDUCATION

PhD in Computer Science , Human-Computer Interaction and Human-AI Interaction <i>University of British Columbia</i> Supervisor: Joanna McGrenere Awards: Four Year Doctoral Fellowship (4YF); President's Academic Excellence Initiative PhD Award	Vancouver, Canada Sep. 2022 - Present
Master of Science , Human-Computer Interaction (GPA 3.70 /4.0) <i>University of Waterloo</i> THESIS - <i>Modeling Cumulative Arm Fatigue on Large Multi-touch Displays</i> [Thesis] (Advisors: Prof. James Wallace, Prof. Daniel Vogel) Relevant Courses: Computer Vision in Human-Computer Interaction, Machine Learning, Deep Learning	Waterloo, Canada May. 2017 - Aug. 2019
Bachelor of Science , Industrial Engineering (GPA 3.65 / 4.0) <i>Tsinghua University</i> Relevant Courses: Programming, Data Structures, Algorithm Analysis, Databases, User-Centered Design	Beijing, China Sep. 2011 - Jul. 2015

RESEARCH EXPERIENCE

Enhancing Semi-Structured Interviews with AI-driven Interview Assistant - PhD Thesis Project <i>University of British Columbia, UBC eDapt Group</i>	Canada May 2023 - Present
- Conducted qualitative research study with 16 professional interviewers to investigate AI-driven interview assistance; Findings accepted at [CSCW 2025]. - Doctoral research proposal outlining a four-phase study (exploration, prototype design and implementation, evaluation, and field deployment) accepted to the [IUI 2025 Doctoral Consortium]. - Developing and iteratively refining a real-time, AI-powered interview assistant prototype to support interview practice and interviewers' skill development; Findings under [CHI 2026] review	
FollowupQG-U: Enhancing Informative Follow-up Question Generation with Smaller Language Models <i>University of British Columbia, UBC NLP Group</i>	Canada Jan 2024 - Present
- Developed a data augmentation methodology using GPT-4 to expand a limited dataset for follow-up question generation. - Implemented fine-tuning of a small-scale language model using the augmented dataset, demonstrating improved question generation quality and diversity. - Evaluating model performance across multiple benchmark datasets; Findings accepted by [*SEM 2025].	
Interacting with Remote Smart Devices with Hand-held Controllers in Smart Home Environment <i>Huawei Technologies Canada, Human-Machine Interaction Lab</i>	Canada Sep 2020 - Dec 2021
- Conducted comprehensive literature review on pointing selection mechanisms for smartphone and air mouse interfaces. - Developed interaction state diagrams and transfer functions, implementing them in a high-fidelity prototype. - Implemented and evaluated a bi-manual text-entry method with an eyes-free situation for VR display. - Designed and executed a Fitts' Law evaluation study with 30 participants to validate system parameters. - Documented system designs resulting in 2 patents, with interaction framework approved for product implementation.	

PEER-REVIEWED PAPERS

- **Zhe Liu**. Interview AI-assistant: Designing for real-time human-AI collaboration in interview preparation and execution. In *Companion Proceedings of the 30th International Conference on Intelligent User Interfaces*, IUI '25 Companion, pages 225–228, New York, NY, USA, 2025. Association for Computing Machinery. doi:10.1145/3708557.3716148
- **Zhe Liu**, Jiamin Dai, Cristina Conati, and Joanna McGrenere. Envisioning AI support during semi-structured interviews across the expertise spectrum. To appear in *The ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)* (Accepted December 2024), 9(2), 2025
- **Zhe Liu**, Taekyu Kang, Haoyu Wang, Seyed Hossein Alavi, and Vered Shwartz. Bridging information gaps with comprehensive answers: Improving the diversity and informativeness of follow-up questions. In *Proceedings of the 14th Joint Conference on Lexical and Computational Semantics (*SEM 2025)*, In Press 2025
- Hanae Rateau, Edward Lank, and **Zhe Liu**. Leveraging smartwatch and earbuds gesture capture to support wearable interaction. *Proc. ACM Hum.-Comput. Interact.*, 6(ISS), November 2022. doi:10.1145/3567710
- **Zhe Liu**, Daniel Vogel, and James R Wallace. Applying the cumulative fatigue model to interaction on large, multi-touch displays. In *Proceedings of the 7th ACM International Symposium on Pervasive Displays*, page 1. ACM, 2018. doi:10.1145/3205873.3205890
- Pin Sym Foong, Shengdong Zhao, Kelsey Carlson, and **Zhe Liu**. Vita: Towards supporting volunteer interactions with long-term care residents with dementia. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, pages 6195–6207. ACM, 2017. doi:10.1145/3025453.3025776