

## Research Summary

My research integrates Multimodal Large Language Models into XR to: (1) Seamlessly interpret and respond to users' environments in real-time for complex multi-user tasks; (2) Transform educational content into dynamic, AI-driven simulation-based learning experiences through adaptive instruction.

## Research Interests

Extended Reality; Wearable AI; Human-Computer Interaction; Computer Support Social Work; AI in Simulation Learning

## Education

- 2023–2028 **Ph.D. in Interdisciplinary Design and Media**, *Northeastern University*, Boston, MA  
Advisor: Prof. Eileen McGivney
- 2019–2023 **B.A. in Digital Media Arts**, *Communication University of China*, Beijing  
Advisor: Prof. Min Fan

## Publications

\* denotes equal contribution. "Xiuqi Zhu" and "Xiuqi Tommy Zhu" refer to the same author.

### Peer-reviewed Full Conference and Journal Publications

- [J.1] **Xiuqi Tommy Zhu**, Ziyue Qiu, Ye Wei, Jianhao Wang, Yang Jiao. (2025)  
*Understanding the Practice, Perception, and Challenge of Blind or Low Vision Students Learning through Accessible Technologies in Non-Inclusive 'Blind College'.*  
IJHCI(International Journal of Human Computer Interaction)  
<https://doi.org/10.1080/10447318.2025.2526569>
- [C.1] **Xiuqi Zhu**, Cenyi Wang, Zichun Guo, Yifan Zhao, Yang Jiao. (2023)  
*Can You Move It?: The Design and Evaluate of Moving Shots in VR Sports Broadcast.*  
ISMAR 2023(International Symposium on Mixed and Augmented Reality)  
<https://ieeexplore.ieee.org/abstract/document/10316354>

### Posters, Extended Abstracts, and Workshop Papers

- [P.3] **Xiuqi Tommy Zhu**, Heidi Cheerman, Mingxin Cheng, Sheri Kiami, Leanne Chukoskie, Eileen McGivney. (2025)  
*Designing VR Simulation System for Clinical Communication Training with LLMs-Based Embodied Conversational Agents.*  
CHI EA 2025 (Human Factors in Computing Systems)  
<https://doi.org/10.1145/3706599.3719693>
- [P.2] **Xiuqi Zhu**, Min Fan, Zhuohao Wu, Jiayi Lu, Yukai Liu. (2023)  
*Co-Space: A Tangible System Supporting Social Attention and Social Behavioral Development through Embodied Play for Children with ASD.*  
IDC WIP 2023(Interaction Design and Children)  
<https://doi.org/10.1145/3585088.3593911>

- [P.1] **Xiuqi Zhu**, Jingyu Zhang, Tongyang Liu, Gang He.(2022)  
*An Initial Attempt to Build a Natural Sounds Library based on Heuristic Evaluation.*  
HCI 2022 Poster(International Conference on Human-Computer Interaction)  
[https://doi.org/10.1007/978-3-031-19679-9\\_90](https://doi.org/10.1007/978-3-031-19679-9_90)

### Manuscripts Under Review and Work in Progress

- [U.1] Yixuan Li\*, Shuai Wang\*, **Xiuqi Tommy Zhu**, Rui Zhang, Yang Jiao.  
*HaptiFab: A Wearable Toolkit Supports the Integration of Haptic Actuator and Fabric.*  
TEI Pictorial 2026 - Under Review
- [U.2] **Xiuqi Tommy Zhu**, Xiaoan Liu, Casper Hartevelde, Smit Desai, Eileen McGivney.  
*Reimagining the Future of Smart Glasses Through Exploring Conversational Successes and Breakdowns.*  
CHI 2026 - Under Review
- [U.3] **Xiuqi Tommy Zhu**, Heidi Cheerman, Mingxin Cheng, Sheri Kiami, Leanne Chukoskie, Eileen McGivney.  
*"It doesn't look real, but it did feel real": Designing an LLM-Powered VR Simulation for Health Education.*  
CHI 2026 - Under Review

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## Professional Experience

- 2025.9–Present **Graduate Teaching Assistant**, *Northeastern University*  
ARTG2263 Lab with Creative Prototype (Python)
- 2024–2025 **Graduate Research Assistant**, *Northeastern University*  
With Prof. Eileen McGivney
- 2023–2024 **Graduate Research Assistant**, *Northeastern University*  
With Prof. Dakuo Wang
- 2021–2023 **Research Intern** (Outstanding Top 5%), *The Future Lab, Tsinghua University*, Beijing  
Mentors: Prof. Yang Jiao and Prof. Yingqing Xu
- 2022–2023 **User Research Intern**, *Lark Design, ByteDance*, Beijing  
Designed and evaluated People System (HR+Team Management) using mixed-method insights

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## Service

- Reviewer *18 reviews in the past two years.*  
ACM CHI 2025 (2 Recognitions)  
IEEE CoG 2025  
IEEE SUI 2025  
ACM CSCW 2024  
ACM IDC 2023–2024  
ACM DIS 2024–2025  
ACM Chinese CHI 2023–2024
- Student Volunteer ACM CHI 2024 Student Volunteer

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## Student Mentorship

- 2025–Present **Yumo Zhang**, B.A. in The Hong Kong Polytechnic University
- 2025–Present **Daniel Wan**, B.S. in Northeastern University
- 2023–2025 **Yixuan Li**, B.A. in Beijing Forestry University, now M.S. in Tsinghua University [U.1]
- 2022–2023 **Jiayi Lu**, B.A. and M.A. in Communication University of China [P.2]

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## Selected Awards

2022 ★ **Global Runner-up (\$4,200)** – 2022 HONOR Talents Global Design Competition  
2021–2022 **First Prize** – Beijing University Student Animation Design Competition

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## Technical Skills

Research Interviews, Contextual Inquiry, Surveys, Co-design, Controlled Experiments, A/B Testing,  
Methods Usability Testing, Field Studies, Qualitative Coding, Statistical Analysis  
Programming Python, Swift (SwiftUI/UIKit), JavaScript, C#, HTML/CSS  
Platforms & XCode, Unity, ARKit, AFrame, Flask, Firebase, PyTorch, TensorFlow, JAX, Hugging Face,  
Tools LLM Integration (GPT, Claude)  
Design & Figma, Adobe Suite (PS, XD, Illustrator), Miro, Blender  
Prototyping

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## Languages

English (Bilingual proficiency) • Mandarin (Native)