

# SHIHAN FU

✉ shihanfu870@gmail.com    ☎ +86 17326081323

Research Interest: Human-Computer Interaction, Accessibility, Social Computing, Human-AI collaboration, VR/AR

## EDUCATION

---

### **The Hong Kong University of Science and Technology (Guangzhou), China**

*July 2022 - June 2024*

Master of Philosophy | GPA: 3.925/4.0 | Research with Prof. Mingming Fan

Major: Computational Media and Arts, Information Hub

### **Zhejiang University, China**

*July 2017 - June 2022*

Bachelor of Arts | GPA: 3.60/4.0

Major: Russian Language and Literature

## RESEARCH EXPERIENCE

---

### **Research on Adult Literacy Livestreamer Practice and Experience**

*Jun 2023 - Aug 2023*

**Project Leader** | Advised by Prof. Mingming Fan

- Defined the research question and objectives, focusing on exploring the experience of adult literacy livestreamers.
- Conducted ethnographic observations on 20 streamers over a 7-day period, designed and administered questionnaires, facilitated communication with appropriate participants, conducted semi-structured interviews with 12 interviewees, and organized and analyzed interview transcripts using open coding and affinity diagram techniques to derive insights and identify key themes.
- Authored and prepared a research paper for submission to the CHI2024 conference.

### **Research on the Collaboration between Teams and AI in Design**

*Aug 2023 - Sep 2023*

**Project Leader** | Advised by Prof. Wei Zeng

- Defined the research question and objectives, focusing on the intersection of AI, team, and designers.
- Developed a research methodology that integrated autobiographical research and semi-structured interviews to explore the topic. Employed an open coding approach to analyze and organize interview transcripts, extracting significant themes and patterns.
- Authored a research paper providing an analysis of the AI-design relationship and prepared the manuscript for submission to the CHI2024 conference.

### **Research on the Collaboration between Large Language Models (LLMs) and Retirees**

*July 2023 - Aug 2023*

**Project Member** | Advised by Prof. Mingming Fan

- Designed the questionnaire and facilitated the focus group interview process for a user study involving 26 retirees. Guided the research process using a methodology that employed semi-structured interviews to investigate the topic. Utilized an open coding approach to analyze interview transcripts, organizing and extracting key themes and patterns.

### **Meditation VR System Development**

*Apr 2023 - Jun 2023*

**Project Leader** | Advised by Prof. Wei Zeng

- Defined the research topic. Developed a user-friendly VR meditation system using Unity 3D and C#, aiming to provide an immersive experience for novice meditators.
- Conducted a pilot study to assess the effectiveness of the VR meditation system in promoting relaxation and mindfulness.
- Authored a research paper detailing the development process, study methodology, and pilot study findings. The paper was published in the proceedings of VINCI2023.

### **Olfactory Display Hardware Development**

*Apr 2023 - May 2023*

**Project Leader** | Advised by Prof. Mingming Fan

- Designed and built a prototype of an olfactory display using Arduino to enhance user experiences in VR. Implemented the olfactory display prototype, providing users with an immersive art appreciation process in a VR art museum.
- Contributed to the hardware development section of a research paper published in the proceedings of VINCI2023.

## PUBLICATIONS

---

- 1) **Shihan Fu**, Liangliang Qiang and Wei Zeng\*, LOOP Meditation: Enhancing Novice's VR Meditation Experience with Physical Movement, *VINCI 2023*, <https://doi.org/10.1145/3615522.3615538>, *Accepted on 07.01.2023*
- 2) Shumeng Zhang, Ziyang Wang, You Zhou, Hao Cui, **Shihan Fu**, Zeyu Wang and Mingming Fan\*, OdorV-Art: An Initial Exploration of An Olfactory Intervention for Appreciating Style Information of Artworks in Virtual Museum, *VINCI 2023*, <https://doi.org/10.1145/3615522.3615544>, *Accepted on 07.01.2023*

## UNDER REVIEW

---

- 1) Zeyu Xiong#, **Shihan Fu**# and Mingming Fan\*, OperARTistry: AR-based Application for Chinese Traditional Opera (Xiqu) Makeup Tutorials, *Chinese CHI 2024*, (Under Review)
- 2) **Shihan Fu**, Jianhao Chen, Emily Kuang and Mingming Fan\*, Bridging the Literacy Gap for Adults: Understanding How Streamers Teach Adult Literacy on Livestreaming Platforms, *CHI 2024*, (Under Review)
- 3) **Shihan Fu**#, Yuao Wang#, Liangliang Qiang, Kaiyin Zhou, Hongye Gao and Wei Zeng\*, "Teaming but not teamed": Reflections on AI Collaboration with an Interdisciplinary Team in Sculpture Design Practice, *CHI 2024*, (Under Review)
- 4) Jiaan Li, Yulu Hu, **Shihan Fu**, Zhiqing Wu, Pan Hui, and Mingming Fan\*, Talk 'Til You Drop: Exploring the Opportunity of Large Language Models (LLMs) in Empowering Retirees, *CHI 2024*, (Under Review)

## HONORS

---

BAIHUALIN Sourcing Foundation Scholarship in Zhejiang University	<b>2021</b>
BAIHUALIN Sourcing Foundation Scholarship in Zhejiang University	<b>2020</b>

## RELEVANT COURSES

---

Interaction Design	<b>Fall 2021</b>
Assistive Technology Design based on Computational Media and Arts	<b>Fall 2022</b>
AR/VR/MR/XR: Concepts, Theory Technique	<b>Spring 2023</b>
Programming for Virtual and Augmented Reality	<b>Spring 2023</b>

## SKILLS

---

### System Design and Development

- Familiar with developing virtual reality (VR) and augmented reality (AR) applications using Unity 3D and C#.

### User Research

- Experienced in designing research methodologies, conducting semi-structured interviews, and utilizing participatory design methods. Proficient in applying open-coding and affinity diagram techniques for data analysis.

### Academic Writing

- Proficient in formulating and proposing research questions. Skilled in writing research papers and preparing conference submissions, effectively articulating research objectives, methods, and findings.

### Software Skills

- Unity 3D, Photoshop, Adobe Illustrator, C4D, Figma, Axture.