YUEHAN QIAO

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RESEARCH INTERESTS

• Human-computer Interaction(HCI), Accessibility, Human-centered Artificial Intelligence

EDUCATION BACKGROUND

Ph.D. in Information Studies

2024-2029 Expected

College of Information, University of Maryland, College Park

· Advisor: Hernisa Kacorri

• GPA: 4.0/4.0

M.A. in Information Art & Design

2021-2024

Academy of Arts & Design, Tsinghua University

- Thesis: Design and Research of Virtual Human Assistive Tool for Deaf and Hard-of-hearing E-commerce Livestreaming
- Committee: Haipeng Mi (advisor), Yingqing Xu, Zhigang Wang, Zhiyong Fu, Keyang Tang, Lie Zhang

B.E. in Electronic Engineering

2017-2021

Department of Electronic Engineering, Tsinghua University

PUBLICATIONS

Peer-Reviewed Conference Papers:

- Yuehan Qiao, Zhihao Yao, Meiyu Hu, and Qianyao Xu. 2025. Virtual Co-presenter: Connecting Deaf and Hard-of-hearing Livestreamers and Hearing audience in E-commerce Livestreaming. In Proceedings of In Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '25).
- Yunbing Chen, Ke Shen, Gang Yu, **Yuehan Qiao**, Xiangning Yan, Wuwei Zhang, and Yingqing Xu. 2022. *EEG-Based Artistic Visualization of Dreams*. In Proceedings of the Ninth International Symposium of Chinese CHI (Chinese CHI '21).

Other Publications:

- Yuehan Qiao. 2024. Design and Research of Virtual Human Assistive Tool for Deaf and Hard-of-hearing E-commerce Live-streaming. Master's Thesis, Academy of Arts & Design, Tsinghua University.
- Zhihao Yao, **Yuehan Qiao**, Qianyao Xu. 2023. *Research on Virtual Human Design in Smart Home*. Journal of Computer-Aided Design & Computer Graphics, 35(2): 221-229. (in Chinese)

PROFESSIONAL EXPERIENCES

Apple R&D. Product Design Engineer Intern

11/2023-08/2024

Mac & Input Device Product Design Team, Shanghai Branch

Project: Developing keyboard pressure detection and signal recognition system
 Mentors: Ming (Gavin) Gao and Chiachi (Jackie) Wu
 Designed and implemented mechanical and hardware systems for functional innovation and experience optimization of input devices.

Tsinghua University. Executive Project Manager

12/2022-10/2023

The Future Laboratory

• *Project:* Optimization of Typing Experience for Zero-travel Keyboard Developed and evaluated prototype to optimize the user experience of vibrating keyboard.

Tsinghua University. Reasearch Assistant

09/2021-08/2023

The Future Laboratory

• *Project:* Leverage LLMs to support project-based learning (PBL) in middle school classroom *Advisor:* Jiangtao Gong

Explored how LLMs boost PBL and surveyed students' varied trust and complex perspectives on LLMs' impact on their creativity through two 48-hour LLM-involved PBL instructional programs for middle school students.

 Project: Optimization of color display on mobile devices for different image categories Advisor: Qianyao Xu

Collaborator: Xiaomi Corporation

Investigated the user preference for color display in different image content categories and built a dataset as well as a machine-learning-based solution on it.

 Project: Olfactory perception and recognition on robotic dog: a solution based on MEMs gas sensor module Advisors: Qi Lu and Yingqing Xu

Collaborator: Xiaomi Corporation

Launched a robotic dog with olfactory perception for commercial use by using a novel electronic nose composed of 19 MEMS gas sensors.

TEACHING EXPERIENCES

• Introduction to Programming for Information Science

(Undergraduate Level, 55 students)

Spring 2025

(Undergraduate Level, 189 students)

Fall 2024

Graduate Teaching Assistant for INST126, University of Maryland

Led weekly discussions to review concepts, practice coding, organize peer programming, and hold TA office hours.

• Innovation Project-based Learning Summer Camps about Developing Low Carbon Campus

(Middle School, 2 summer camps with 80 students in total)

Summer 2023

Curriculum Development and Course Assistant, Tsinghua University

Co-designed a summer camp with instructors and facilitated two summer camps for middle school students.

• Art & Technology: From AI to NFTs (Course to the public)

Fall 2022

Course Assistant, Online live program held by Sotheby's

Evaluated students' assignments and provided constructive feedback.

• Advanced Information Technology and Application in Design (Graduate Level, 20 students) Spring 2022 Graduate Teaching Assistant, Tsinghua University

Prepared course materials and evaluated students' projects.

TALKS

• Apple R&D. *Internship Midterm & Final Presentations* Internal innovative prototype and tool set development.

2024

PROFESSIONAL AFFILIATION & MEMBERSHIP

Member of Association for Computing Machinery (ACM)
Special Interest Group on Accessibility and Computing (SIGACCESS) & Human-Computer Interaction (SIGCHI)