Yuehan Qiao

yhqiao@umd.edu | https://qiao-yh.github.io/web/

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 Live-streaming
- 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*

- Thesis: Recognition and Information Extraction of Wine Labels and Application Intergration
- Thesis Advisor: Yingqing Xu

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
  Collaborators: Ming (Gavin) Gao and Xuyao Shi
  Developed and evaluated prototype to optimize user experience of vibrating keyboard.

Tsinghua University. Reasearch Assistant   09/2021-08/2023

The Future Laboratory

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

- *Project:* Optimization of color display on mobile devices for different image categories
  Advisor: Qianyao Xu
  Collaborator: Xiaomi Corporation

- *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

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)

TEACHING EXPERIENCES

- **Introduction to Programming for Information Science** (Undergraduate Level, 55 students)   Spring 2025
  Graduate Teaching Assistant for INST126, University of Maryland
  Lead weekly discussions to review concepts, organize peer programming, and hold TA office hours.

- **Introduction to Programming for Information Science** (Undergraduate Level, 189 students)   Fall 2024
  Graduate Teaching Assistant for INST126, University of Maryland
  Led weekly discussions to practice coding and held 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** (Courses 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*   2024
  Internal innovative prototype and tool set development.

PROFESSIONAL AFFILIATION & MEMBERSHIP

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