Jeremy Zhengqi Huang

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Overview

My research develops human-AI systems that help people make sense of complex multimodal information across real-world and media contexts. I design adaptive interfaces that let users transform inputs (e.g., audio and video) into flexible, accessible formats that match their cognitive and sensory needs.

Keywords: Human-Computer Interaction, Applied AI, Human-AI Interaction, Multimodal Systems, Accessibility, Sensemaking.

Education

2024-	**University of Michigan** – Ann Arbor, MI Ph.D., Computer Science & Engineering Advisor: Prof. Dhruv Jain.
2021 – 2023	**University of Michigan** – Ann Arbor, MI M.S. in Information (Specialization: Human-Computer Interaction) *Thesis: Understanding and Augmenting Debates on Reddit* Thesis advisor: Prof. Eytan Adar *GPA: 3.93.*
2016 – 2021	**The Ohio State University** – Columbus, OH B.S. in Data Analytics and Psychology *with Research Distinction* *Thesis: Leveraging Cognitive Factors to Improve Sustainability Education* Thesis advisor: Prof. Brittany Shoots-Reinhard. *GPA: 3.837.*

Publications

C.06	**Huang, J.**, de Lacerda Pataca, C., Wu, L.Y., Jain D. CapTune: Caption Personalization and Tuning for Non-Speech Information in Cinematic Experiences Using Generative Models. In *Proceedings of the 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2025)* [Acceptance Rate: 29.7%]
C.05	**Huang, J.**, Herskovitz, J., Wu, L.Y., Morrison, C., Jain D. Weaving Sound Information to Support Real-Time Sensemaking of Auditory Environments: Co-Designing with a DHH User. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '25)* [Acceptance Rate: 27.0%]
C.04	Park, Y., Jin, A., **Huang, J.**, Carr, J., Jain D. MaskSound: Exploring Sound Masking Approaches to Support People with Autism in Managing Noise Sensitivity. In *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2024)* [Acceptance Rate: 29.6%]
C.03	**Huang, J.**, Wood, W, Chhabria, H, Jain D. A Human-AI Collaborative Approach for Designing Sound Awareness Systems. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24)* [Acceptance Rate: 26.4%]

C.02   Do, H., Dang, Q., **Huang J.**, and Jain D., 2023, October. AdaptiveSound: An Interactive Feedback-Loop System to Improve Sound Recognition for Deaf and Hard of Hearing Users. In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2023)* (pp. 1-13)

C.01   **Huang J.**, Chhabria, H, and Jain D., 2023, October. "Not There Yet": Feasibility and Challenges of Mobile Sound Recognition to Support Deaf and Hard-of-Haring People. In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2023)* (pp. 1-13)

Posters and Demos

D.01   **Huang, J.**, de Lacerda Pataca, C., Wu, L.Y., Jain D. Demo of CapTune: Caption Personalization and Tuning for Non-Speech Information in Cinematic Experiences Using Generative Models. In *Proceedings of the 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2025)*

Professional Experience

2021 – 2023   **Shapiro Design Lab at the University of Michigan Library** – Ann Arbor, MI
Design Researcher, Disability Culture
Mentored by Dr. Justin Schell

2019, 2022   **The Coca-Cola Company** – Atlanta, GA
Consumer Research and Data Analytics Intern

2020-2021   **VECTOR Lab, The Ohio State University** – Columbus, OH
Research Assistant, Mentored by Prof. Jesse Fox

2019-2021   **CAIDe Lab, The Ohio State University** – Columbus, OH
Research Assistant, Mentored by Prof. Brittany Shoots-Reinhard

Honors and Awards

2023   **Best Paper Honorable Mention**, ASSETS 2023

2023   **University of Michigan Library Research Grant**, University of Michigan

2018-2021   **Veeam Software Endowed Scholarship in Data Analytics**, Ohio State University

Service

2025–   **Accessibility Chair**, The 39th Annual ACM Symposium on User Interface Software and Technology (UIST 2026), Michigan, USA

2025   **Student Volunteer**, The 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2025), Denver, CO

2024–   **Event Organizer**, Accessibility, HCI, and Aging Research Group, University of Michigan

2023   **Volunteer**, Michigan AI Symposium, University of Michigan

2022-2023   **Student Leadership Board**, Michigan Institute for Data Science, University of Michigan

2021	**President**, Cognitive Science Club, The Ohio State University
2018-2021	**Student Advisor**, Data Analytics Major, The Ohio State University
2020	**Mentor**, Humanities & Cognitive Sciences High School Summer Institute, The Ohio State University
2018-2020	**Vice President**, The Annie Glenn Chapter of National Stuttering Association

Teaching Experiences

2025	**EECS 493 User Interface Development**, Graduate Student Instructor

Academic Mentoring

2024	**Yuxuan Liu**, University of Michigan, Computer Science and Engineering (Undergraduate)
2022-2024	**Hriday Chhabria**, University of Michigan, Computer Science and Engineering (Undergraduate)
2023-2024	**Reyna Wood**, University of Michigan, Computer Science and Engineering (Undergraduate)
2023-2024	**Andy Jin**, University of Michigan, Computer Science and Engineering (Undergraduate)
2023-2024	**Yuni Park**, University of Michigan, Computer Science and Engineering (Undergraduate)