

Jeremy Zhengqi Huang

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Overview

I study human-AI systems that re-imagine accessibility as a collaborative and adaptive process. I approach this by developing agents that (1) support mixed-ability groups in co-creating and sharing accessible experiences, and (2) enable people with disabilities to personalize how they perceive and navigate sound in their environments.

Keywords: Human-Computer Interaction, Accessibility, Audio AI, Human-AI Interaction, Collaboration.

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: A Call for Sustainable Living: Leveraging Cognitive Factors to Improve Sustainability Education
Thesis advisor: Prof. Brittany Shoots-Reinhard. GPA: 3.837.

Professional and Research Experience


- 2022 – Present **Soundability Lab, University of Michigan** – Ann Arbor, MI
Graduate Research Assistant
Advised by Prof. Dhruv Jain.
- 2021 – 2023 **Shapiro Design Lab at the University of Michigan Library** – Ann Arbor, MI
Design Researcher, Disability Culture
Mentored by Dr. Justin Schell
- 2022 **The Coca-Cola Company** – Atlanta, GA
Technical Consumer Research 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
- 2019 **The Coca-Cola Company** – Atlanta, GA
 Consumer Data Analytics Intern

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**, The Ohio State University
- 2017-2021 **Dean's List**, The Ohio State University
- 2020 **Undergraduate Research Scholarship**, The Ohio State University

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. *To Appear In Proceedings of the 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2025)*
- 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)*
- 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)*
- 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)*
- 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-Hearing People. In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2023)* (pp. 1-13)

Service

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

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)