

CHENGLIN LI

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RESEARCH INTEREST

My research interest lies in designing, developing and evaluating multimodal solutions that drive long-term behavioral and workflow transformation. My work focused on studying human workflows and designing interactive systems that leverage multiple modalities to enhance human capability and support real-world tasks.

EDUCATION

University of Michigan, Ann Arbor <i>M.S. Electrical and Computer Engineering (GPA: 4.00 / 4.00)</i>	08/2024 – Present Ann Arbor, MI
University of Michigan, Ann Arbor <i>B.S. Computer Science (GPA: 3.72 / 4.00)</i>	08/2022 – 05/2024 Ann Arbor, MI
University of Washington <i>B.S. Undeclared Major (GPA: 3.69 / 4.00)</i>	09/2020 – 08/2022 Seattle, WA

RESEARCH EXPERIENCE

Human-AI Lab, UMich [C.2] <i>Research Assistant</i> Supervisor: Dr. Anhong Guo	05/2025 – Present Ann Arbor, MI
<ul style="list-style-type: none">Introduced In-context instructional videos that fully align with users' real-world visual perception to address visual context misalignment in conventional instructional videos.Designed and conducted two user studies across two first-aid and two culinary tasks to examine how each visual context (<i>Task Object Intrinsic</i>, <i>Task Object State</i>, <i>Environmental Context</i>, and <i>Observational Context</i>) in instructional videos affects physical-task performance.	
Soundability Lab, UMich [D.1] [C.1] <i>Research Assistant</i> Supervisor: Dr. Dhruv Jain & Dr. Venkatesh Potluri	08/2024 – 09/2025 Ann Arbor, MI
<ul style="list-style-type: none">Developed and evaluated RAVEN, a generative AI-powered system enabling blind and low-vision users to query and modify 3D virtual environments through natural language.Conducted user studies with blind and low-vision and deaf and hard-of-hearing participants to examine users' workflow, benefits, and challenges when interacting with the system.	
Future Programming Lab, UMich <i>Research Assistant</i> Supervisor: Dr. Cyrus Omar	05/2023 – 01/2024 Ann Arbor, MI
<ul style="list-style-type: none">Developed RustViz2, an interactive visualization tool illustrating Rust's ownership, borrowing, and lifetime concepts; enhanced both front-end SVG animation and back-end functionality using Rust, XML, and JavaScript.Evaluated usability through feedback from 61 students and comparative analysis with RustViz1 to assess learning effectiveness and design improvements.	

PUBLICATIONS

- [C.2] Yayuan Li*, **Chenglin Li***, Jingying Wang, Filippas Bellos, Anhong Guo† and Jason J. Corso†. *Aligning Visual Context in Instructional Videos for Physical Task Assistance: Effectiveness, Attribution, and Feasibility*. in submission to **CHI '26**.
- [C.1] Xinyun Cao, Kexin Phyllis Ju, **Chenglin Li**, Venkatesh Potluri, and Dhruv Jain. *RAVEN: Realtime Accessibility in Virtual ENvironments for Blind and Low-Vision People*. in submission to **CHI '26**.

POSTERS AND DEMOS

- [D.1] Xinyun Cao, Kexin Phyllis Ju, **Chenglin Li**, Venkatesh Potluri, and Dhruv Jain. *Demo of RAVEN: Realtime Accessibility in Virtual ENvironments for Blind and Low-Vision People*. **CHI '25 LBW**, **ASSETS '25 Demo (Best Demo Award)**.

TEACHING EXPERIENCE

- CSE Department, UMich** 08/2024 – Present
Graduate Student Instructor Ann Arbor, MI
Supervisor: Dr. Sugih Jamin, Dr. Elliot Soloway
- Updated labs for Mobile App Development courses taught by Dr. Sugih Jamin, incorporating SwiftUI, Jetpack Compose, Python, Go, Rust and JavaScript.
 - Assisted a new course taught by Dr. Sugih Jamin. Designed tutorials and projects in Jetpack Compose, Python, Go, Rust and JavaScript.
 - Designed and held discussion sessions and weekly office hour with 120 students.
 - Created grading rubrics and graded labs, tutorials and projects.

SERVICES

- Co-Founder** of TOPERA, a student club for Peking Opera enthusiasts at the University of Washington, Seattle, WA 2020 – 2022
- Volunteer** at Shenyang Guangming School for the Blind, Liaoning, China 2020
- Volunteer** at Liaoning Orphanage School, Liaoning, China 2020
- Volunteer** at Shenyang Xingfu Senior Home, Liaoning, China 2019

SKILLS / HOBBIES

- Engineering:** Kotlin/Jetpack Compose, Swift/SwiftUI, Python, C/C++, C#, Rust, Go, Dart, JavaScript, SQL (PostgreSQL), R, HTML/CSS
- Prototyping:** Figma, Unity, Arduino, Blender
- Hobbies:** Peking Opera, Badminton, Piano, Photography