

JIASHENG LI

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EDUCATION

University of Maryland, College Park, MD, USA Aug 2021 - Present

Ph.D. in Computer Science

– Research interests: accessibility, virtual reality, haptic devices, human-computer interaction(HCI)

– Advisor: Dr. Huaishu Peng

University of Maryland, College Park, MD, USA Jan 2020 - Aug 2021

M.S. in Telecommunication

Virginia Tech, VA, USA Aug 2015 - May 2019

B.S. in Electrical Engineering

AWARDS & HONORS

Best Paper Honorable Mention (CHI 2023) April 2023

Dean's Fellowship, University of Maryland, College Park (\$5,000) 2021, 2022

RESEARCH EXPERIENCE

Small Artifacts Lab, University of Maryland College Park, MD USA

Graduate Research Assistant (Advisors: **Dr. Huaishu, Peng**) *Sept 2020 - Present*

- Developing assistive devices and multimodal interaction technologies, such as tangible user interfaces and haptic devices, that aims to improve blind people's interaction experience in the digital world.
- Conducting user-orientated studies to explore blind users' perceptions of the VR environment and investigate their interaction strategies in using haptic devices.
- Designing and implementing active haptic interfaces that utilize wearable devices or on-body robots to provide real-time haptic feedback for blind users in creating immersive virtual experiences.
- Exploring and evaluating the potentially accessible communication interfaces for blind users in VR settings.

PUBLICATIONS & INVITED TALKS

Full Papers

- [P.1] **Jiasheng Li**, Zeyu Yan, Arush Shah, Jonathan Lazar, and Huaishu Peng. 2023. Touchally: Making Inaccessible Public Touchscreens Accessible. *In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (ACM CHI '23). **[Best paper honorable mention]** [\[link\]](#)
- [P.2] Niall L Williams, **Jiasheng Li**, Ming C Lin. 2023. A Framework for Active Haptic Guidance Using Robotic Haptic Proxies. *IEEE International Conference on Robotics and Automation* (IEEE ICRA '23). [\[link\]](#)
- [P.3] **Jiasheng Li**, Zeyu Yan, Ebrima Haddy Jarjue, Ashrith Shetty, and Huaishu Peng. 2022. TangibleGrid: Tangible Web Layout Design for Blind Users. *In Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology* (ACM UIST '22). [\[link\]](#)
- [P.4] Anup Sathya, **Jiasheng Li**, Tauhidur Rahman, Ge Gao, and Huaishu Peng. 2022. Calico: Relocatable On-cloth Wearables with Fast, Reliable, and Precise Locomotion. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol* (ACM IMWUT 2022).[\[link\]](#)
- [P.5] Xiaojun Quan, Ming Gao, Ping Cheng, **Jiasheng Li**. 2015. An experimental investigation of pool boiling heat transfer on smooth/rib surfaces under an electric field, *International Journal of Heat and Mass Transfer* [\[link\]](#)

Demos and Posters

- [D.1] **Jiasheng Li**, Zeyu Yan, Ebrima Haddy Jarjue, Ashrith Shetty, and Huaishu Peng. 2022. Demonstration of TangibleGrid: a Tangible Web Layout Design Tool for Blind Users. *In Adjunct Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (ACM UIST '22 Adjunct)*. [[link](#)]

TEACHING EXPERIENCE

Graduate Teaching Assistant (Head TA)

University of Maryland, College Park

Aug 2021 - Present

College Park, MD

- **TA duties:** Leading other TAs, held office hours, designed programming assignments, and graded assignments and exams.
- **Courses TA'd for:** Javascript Programming & Web Application Development

Graduate Teaching Assistant

University of Maryland, College Park

Aug 2020 - Dec 2020

College Park, MD

- **TA duties:** Held office hours, graded assignments and exams.
- **Courses TA'd for:** Decision Support Methods for Telecommunication Managers

Laboratory Assistant

Virginia Tech, Blacksburg

Aug 2019 - Nov 2019

Blacksburg, VA

- Manage, design, and implement lab equipment, such as printed circuit boards (PCBs) and Arduino.
- Supervisor: Dr. Steve Southward, Associate Professor.

MEDIA COVERAGE

- *Calico Robot Assistant: The Tiny, On-Cloth Wearable Device That Can Zip Around Your Clothing*
- **The Science Times**
Link: <https://www.sciencetimes.com/articles/44407/20230620/calico-robot-assistant-tiny-cloth-...>
- *Graduate Student's Innovative Technology for the Visually Impaired Honored at CHI 2023 Conference*
- **UMD**
Link: <https://www.cs.umd.edu/article/2023/06/umd-cs-graduate-student's-innovative-technology-...>
- *A Wearable Robotic Assistant That's All Over You*
- **IEEE Spectrum**
Link: <https://spectrum.ieee.org/wearable-robotics>
- *THE CALICO WEARABLE RIDES THE RAILS*
- **Hackday**
Link: <https://hackaday.com/2022/09/14/the-calico-wearable-rides-the-rails/>
- *System Breaks Down Barriers for Blind Web Designers*
- **NewsWires, UMD**
Link: https://www.einnews.com/pr_news/597647252/system-breaks-down-barriers-for-blind-...
Link: <https://today.umd.edu/system-breaks-down-barriers-for-blind-web-designers>

PROFESSIONAL SERVICES & COMMUNITY INVOLVEMENT

Peer Reviewing

CHI Conference on Human Factors in Computing Systems, ACM Symposium on User Interface Software and Technology (UIST), ACM Interaction Design and Children (IDC) Conference, ACM Designing Interactive Systems (DIS)

2023 - Present

Conference Volunteer

CHI Conference on Human Factors in Computing Systems

2023

University of Maryland

Graduate admissions application reviewer

2022

MENTORING EXPERIENCE

Undergraduate Students Matthew Wong (University of Maryland, College Park)

2023 - present