Anhong Guo   Curriculum Vitæ

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anhong@umich.edu

Research Interest

We design, develop, deploy, and study human-AI systems to support *Personal Accessibility*. We empower people to leverage their domain expertise to create and customize technology for themselves. By doing so, we highlight the unique needs of people (e.g., people with disabilities) and the importance of designing for a long-tail of needs, so that technologies can best support them.

Academic Positions

01/2021 –   **University of Michigan, Ann Arbor**
Assistant Professor, Computer Science and Engineering (EECS); School of Information (by courtesy)

09/2020 –   **Carnegie Mellon University**
12/2020   Postdoctoral Fellow, Human-Computer Interaction Institute, School of Computer Science

Education

08/2014 –   **Carnegie Mellon University**
08/2020   Ph.D. in Human-Computer Interaction
M.S. in Human-Computer Interaction
Human-Computer Interaction Institute, School of Computer Science
Thesis: Human-AI Systems for Visual Information Access
Advisor: Jeffrey P. Bigham; Committee: Chris Harrison, Jodi Forlizzi, and Meredith Ringel Morris

08/2012 –   **Georgia Institute of Technology**
05/2014   M.S. in Human-Computer Interaction
School of Interactive Computing
Thesis: BeyondTouch: Extending the Input Language with Built-in Sensors on Commodity Smartphones
Advisor: Gregory Abowd

09/2008 –   **Beijing University of Posts and Telecommunications (BUPT)**
06/2012   B.Eng. in Electronic Information Engineering
School of Information and Communication Engineering

Awards and Honors

2024   **ISWC 10-Year Impact Award for 2014 paper evaluating order picking methods [C.1]**

2024   **Google Academic Research Award**

2024   **UIST 2024 Best Paper Award [C.41]**

2022   **Google Research Scholar Award**

2022   **CHI 2022 Best Paper Honorable Mention [C.27]**

2021   **CHI 2021 Best Paper Honorable Mention [C.23]**

2021   **Forbes' Top 30 Scientists Under 30 ('30 Under 30')**

2020   **ASSETS 2020 Best Paper Nominee [C.21]**

2019   **ASSETS 2019 Best Artifact Award [C.17]**

2018   **CMU Swartz Innovation Fellowship**

Peer-Reviewed Conference and Journal Papers

[C.42] Jaylin Herskovitz, Andi Xu, Rahaf Alharbi, **Anhong Guo**. ProgramAlly: Creating Custom Visual Access Programs via Multi-Modal End-User Programming. In *Proceedings of the 37th Annual ACM Symposium on User Interface Software & Technology (***UIST 2024***)*. Pittsburgh, PA, USA. 2024. [Acceptance Rate: 24.0%]

[C.41] Ruei-Che Chang, Yuxuan Liu, **Anhong Guo**. WorldScribe: Towards Context-Aware Live Visual Descriptions. In *Proceedings of the 37th Annual ACM Symposium on User Interface Software & Technology (***UIST 2024***)*. Pittsburgh, PA, USA. 2024. [Acceptance Rate: 24.0%]
Best Paper Award

[C.40] Lei Zhang, Jin Pan, Jacob Gettig, Steve Oney, **Anhong Guo**. VRCopilot: Authoring 3D Layouts with Generative AI Models in VR. In *Proceedings of the 37th Annual ACM Symposium on User Interface Software & Technology (***UIST 2024***)*. Pittsburgh, PA, USA. 2024. [Acceptance Rate: 24.0%]

[C.39] Ruei-Che Chang, Yuxuan Liu, Lotus Zhang, **Anhong Guo**. EditScribe: Non-Visual Image Editing with Natural Language Verification Loops. In *Proceedings of the 26th International ACM SIGACCESS Conference on Computers and Accessibility (***ASSETS 2024***)*. St. John's, Newfoundland and Labrador. 2024. [Acceptance Rate: 30%]

[C.38] Rosiana Natalie, Ruei-Che Chang, Smitha Sheshadri, **Anhong Guo**, Kotaro Hara. Audio Description Customization. In *Proceedings of the 26th International ACM SIGACCESS Conference on Computers and Accessibility (***ASSETS 2024***)*. St. John's, Newfoundland and Labrador. 2024. [Acceptance Rate: 30%]

[C.37] Ruei-Che Chang, Chia-Sheng Hung, Bing-Yu Chen, Dhruv Jain, **Anhong Guo**. SoundShift: Exploring Sound Manipulations for Accessible Mixed-Reality Awareness. In *Proceedings of the 2024 ACM Conference on Designing Interactive Systems (***DIS 2024***)*. Copenhagen, Denmark. 2024. [Acceptance Rate: 27.4%]

[C.36] Andi Xu, Minyu Cai, Dier Hou, Ruei-Che Chang, **Anhong Guo**. ImageExplorer Deployment: Understanding Text-Based and Touch-Based Image Exploration in the Wild. In *Proceedings of the 21st International Web for All Conference (***W4A 2024***)*. Singapore. 2024.

[C.35] Tao Lu, Hongxiao Zheng, Tianying Zhang, Xuhai Xu, **Anhong Guo**. InteractOut: Leveraging Interaction Proxies as Input Manipulation Strategies for Reducing Smartphone Overuse. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (***CHI 2024***)*. Honolulu, Hawaii. 2024. [Acceptance Rate: 26.3%]

[C.34] Chen Liang, Yasha Iravantchi, Thomas Krolikowski, Ruijie Geng, Alanson P. Sample, **Anhong Guo**. BrushLens: Hardware Interaction Proxies for Accessible Touchscreen Interface Actuation. In *Proceedings of the 36th Annual ACM Symposium on User Interface Software & Technology (***UIST 2023***)*. San Francisco, CA. 2023. [Acceptance Rate: 25.1%]

[C.33] Jaylin Herskovitz, Andi Xu, Rahaf Alharbi, **Anhong Guo**. Hacking, Switching, Combining: Understanding and Supporting DIY Assistive Technology Design by Blind People. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (***CHI 2023***)*. Hamburg, Germany. 2023. [Acceptance Rate: 28.4%]

[C.32] Lei Zhang, Ashutosh Agrawal, Steve Oney, **Anhong Guo**. VRGit: A Version Control System for Collaborative Content Creation in Virtual Reality. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (***CHI 2023***)*. Hamburg, Germany. 2023. [Acceptance Rate: 28.4%]

[C.31] Stephan J. Lemmer, **Anhong Guo**, Jason J. Corso. Human-Centered Deferred Inference: Measuring User Interactions and Setting Deferral Criteria for Human-AI Teams. In *Proceedings of the 28th International Conference on Intelligent User Interfaces (***IUI 2023***)*. Sydney, Australia. 2023. [Acceptance Rate: 24.1%]

[C.30] Ruei-Che Chang, Chao-Hsien Ting, Chia-Sheng Hung, Wan-Chen Lee, Liang-Jin Chen, Yu-Tzu Chao, Bing-Yu Chen, **Anhong Guo**. OmniScribe: Authoring Immersive Audio Descriptions for 360° Videos. In *Proceedings of the 35th Annual ACM Symposium on User Interface Software & Technology (*UIST 2022*).* Bend, OR. 2022. [Acceptance Rate: 26.3%]

[C.29] Jaylin Herskovitz, Yi Fei Cheng, **Anhong Guo**, Alanson Sample, Michael Nebeling. XSpace: An Augmented Reality Toolkit for Enabling Spatially-Aware Distributed Collaboration. In *Proceedings of the ACM on Human-Computer Interaction (*ISS 2022*).* Wellington, New Zealand. 2022.

[C.28] Chen Liang, **Anhong Guo**, Jeeeun Kim. CustomizAR: Facilitating Interactive Exploration and Measurement of 3D Customizable Adaptive Designs. In *Proceedings of the 2022 ACM Conference on Designing Interactive Systems (*DIS 2022*).* Virtual Event, 2022. [Acceptance Rate: 21.5%]

[C.27] Cheuk Yin Phipson Lee*, Zhuohao Zhang*, Jaylin Herskovitz, JooYoung Seo, **Anhong Guo**. CollabAlly: Accessible Collaboration Awareness in Document Editing. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (*CHI 2022*).* New Orleans, LA. 2022. [Acceptance Rate: 24.7%]
Best Paper Honorable Mention

[C.26] Jaewook Lee, Jaylin Herskovitz, Yi-Hao Peng, **Anhong Guo**. ImageExplorer: Multi-Layered Touch Exploration to Encourage Skepticism Towards Imperfect AI-Generated Image Captions. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (*CHI 2022*).* New Orleans, LA. 2022. [Acceptance Rate: 24.7%]

[C.25] Junhan Kong, Dena Sabha, Jeffrey P. Bigham, Amy Pavel, **Anhong Guo**. TutorialLens: Authoring Interactive Augmented Reality Tutorials Through Narration and Demonstration. In *Proceedings of the Symposium on Spatial User Interaction (*SUI 2021*).* Virtual Event, 2021.

[C.24] Solon Barocas, **Anhong Guo**, Ece Kamar, Jacquelyn Krones, Meredith Ringel Morris, Jennifer Wortman Vaughan, Duncan Wadsworth, Hanna Wallach. Designing Disaggregated Evaluations of AI Systems: Choices, Considerations, and Tradeoffs. In *Proceedings of the Fourth AAAI/ACM Conference on AI, Ethics, and Society (*AIES 2021*).* Virtual Event, 2021. [Acceptance Rate: 37.3%]

[C.23] Cynthia L. Bennett, Cole Gleason, Morgan Klaus Scheuerman, Jeffrey P. Bigham, **Anhong Guo**, Alexandra To. "It's Complicated": Negotiating Accessibility and (Mis)Representation in Image Descriptions of Race, Gender, and Disability. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (*CHI 2021*).* Virtual Event, Japan. 2021. [Acceptance Rate: 26.3%]
Best Paper Honorable Mention

[C.22] Jaylin Herskovitz, Jason Wu, Samuel White, Amy Pavel, Gabriel Reyes, **Anhong Guo**, Jeffrey P. Bigham. Making Mobile Augmented Reality Applications Accessible. In *Proceedings of the 22nd International ACM SIGACCESS Conference on Computers and Accessibility (*ASSETS 2020*).* Virtual Event, Greece. 2020. [Acceptance Rate: 28%]

[C.21] Shaun Kane, **Anhong Guo**, Meredith Ringel Morris. Sense and Accessibility: Understanding People with Physical Disabilities' Experiences with Sensing Systems. In *Proceedings of the 22nd International ACM SIGACCESS Conference on Computers and Accessibility (*ASSETS 2020*).* Virtual Event, Greece. 2020. [Acceptance Rate: 28%]
Best Paper Nominee

[C.20] Cole Gleason*, Stephanie Valencia*, Lynn Kirabo, Jason Wu, **Anhong Guo**, Elizabeth Jeanne Carter, Jeffrey P. Bigham, Cynthia L. Bennett+, Amy Pavel+. Disability and the COVID-19 Pandemic: Using Social Media to Understand Accessibility during Rapid Societal Transition. In *Proceedings of the 22nd International ACM SIGACCESS Conference on Computers and Accessibility (*ASSETS 2020*).* Virtual Event, Greece. 2020. [Acceptance Rate: 28%]

[C.19] **Anhong Guo**, Junhan Kong, Michael Rivera, Frank F. Xu, Jeffrey P. Bigham. StateLens: A Reverse Engineering Solution for Making Existing Dynamic Touchscreens Accessible. In *Proceedings of the 32nd Annual ACM Symposium on User Interface Software & Technology (*UIST 2019*).* New Orleans, LA. 2019. [Acceptance Rate: 24.4%]

[C.18] **Anhong Guo**, Ilter Canberk, Hannah Murphy, Andrés Monroy-Hernández, Rajan Vaish. Blocks: Collaborative and Persistent Augmented Reality Experiences. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (*Ubicomp 2019*)* 3.3: 83. London, United Kingdom. 2019.

[C.17] Sujeath Pareddy, **Anhong Guo**, Jeffrey P. Bigham. X-Ray: Screenshot Accessibility via Embedded Metadata. In *Proceedings of the 21st International ACM SIGACCESS Conference on Computers and Accessibility (**ASSETS 2019**)*. Pittsburgh, PA. 2019. [Acceptance Rate: 26%]
Best Artifact Award

[C.16] Danna Gurari, Qing Li, Chi Lin, Yinan Zhao, **Anhong Guo**, Abigale Stangl, Jeffrey P. Bigham. VizWiz-Priv: A Dataset for Recognizing the Presence and Purpose of Private Visual Information in Images Taken by Blind People. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (**CVPR 2019**)*. Long Beach, CA. 2019. [Acceptance Rate: 25.2%]

[C.15] Runchang Kang, **Anhong Guo**, Gierad Laput, Yang Li, Xiang 'Anthony' Chen. Minuet: Multimodal Interaction with an Internet of Things. In *Proceedings of the Symposium on Spatial User Interaction (**SUI 2019**)*. New Orleans, LA. 2019.

[C.14] **Anhong Guo**, Anuraag Jain, Shomiron Ghose, Gierad Laput, Chris Harrison, Jeffrey P. Bigham. Crowd-AI Camera Sensing in the Real World. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (**Ubicomp 2018**)* 2.3: 111. Singapore. 2018.

[C.13] **Anhong Guo**, Saige McVea, Xu Wang, Patrick Clary, Ken Goldman, Yang Li, Yu Zhong, Jeffrey Bigham. Investigating Cursor-based Interactions to Support Non-Visual Exploration in the Real World. In *Proceedings of the 20th International ACM SIGACCESS Conference on Computers and Accessibility (**ASSETS 2018**)*. Galway, Ireland. 2018. [Acceptance Rate: 26%]

[C.12] Danna Gurari, Qing Li, Abigale Stangl, **Anhong Guo**, Chi Lin, Kristen Grauman, Jiebo Luo, Jeffrey P. Bigham. VizWiz Grand Challenge: Answering Visual Questions from Blind People. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (**CVPR 2018**)*. Salt Lake City, Utah. 2018. [Acceptance Rate: 29%]
Spotlight Presentation (Top 9% of 3309 submissions)

[C.11] **Anhong Guo**, Jeeeun Kim, Xiang 'Anthony' Chen, Tom Yeh, Scott Hudson, Jennifer Mankoff, Jeffrey P. Bigham. Facade: Auto-generating Tactile Interfaces to Appliances. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (**CHI 2017**)*. Denver, CO. 2017. [Acceptance Rate: 25%]

[C.10] Jeeeun Kim, **Anhong Guo**, Tom Yeh, Scott Hudson, Jennifer Mankoff. Understanding Uncertainty in Measurement and Accommodating its Impact in 3D Modeling and Printing. In *Proceedings of the 2017 ACM Conference on Designing Interactive Systems (**DIS 2017**)*. Edinburgh, United Kingdom. 2017. [Acceptance Rate: 22%]

[C.9] **Anhong Guo**, Xiang 'Anthony' Chen, Haoran Qi, Samuel White, Suman Ghosh, Chieko Asakawa, Jeffrey P. Bigham. VizLens: A Robust and Interactive Screen Reader for Interfaces in the Real World. In *Proceedings of the 29th Annual ACM Symposium on User Interface Software & Technology (**UIST 2016**)*. Tokyo, Japan. 2016. [Acceptance Rate: 20.6%]

[C.8] **Anhong Guo**, Tim Paek. Exploring Tilt for No-Touch, Wrist-Only Interactions on Smartwatches. In *Proceedings of the 14th international conference on Human-computer interaction with mobile devices and services (**MobileHCI 2016**)*. Florence, Italy. 2016. [Acceptance Rate: 24%]
Best Paper Honorable Mention

[C.7] Michael Nebeling, Alexandra To, **Anhong Guo**, Adrian de Freitas, Jaime Teevan, Steven Dow, Jeffrey P. Bigham. WearWrite: Crowd-Assisted Writing from Smartwatches. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (**CHI 2016**)*. San Jose, CA. 2016. [Acceptance Rate: 23.4%]

[C.6] Xiaolong Wu, Malcolm Haynes, **Anhong Guo**, Thad Starner. A Comparison of Order Picking Methods Augmented with Weight Checking Error Detection. In *Proceedings of the 2016 ACM International Symposium on Wearable Computers (**ISWC 2016**)*. Heidelberg, Germany. 2016. [Acceptance Rate: 19%]

[C.5] Cheng Zhang, **Anhong Guo**, Dingtian Zhang, Yang Li, Caleb Southern, Rosa Arriaga, Gregory Abowd. Beyond the Touchscreen: An Exploration of Extending Interactions on Commodity Smartphones. *ACM Transactions on Interactive Intelligent Systems (**TiiS**)*. 6.2 (2016).

[C.4] **Anhong Guo**, Robert Xiao, Chris Harrison. CapAuth: Identifying and Differentiating User Handprints on Commodity Capacitive Touchscreens. In *Proceedings of the 10th ACM International Conference on Interactive Tabletops and Surfaces (**ITS 2015**)*. Madeira, Portugal. 2015. [Acceptance Rate: 24%]

[C.3] Cheng Zhang, **Anhong Guo**, Dingtian Zhang, Caleb Southern, Rosa Arriaga, Gregory Abowd. Beyond-Touch: Extending the Input Language with Built-in Sensors on Commodity Smartphones. In *Proceedings of the 20th International Conference on Intelligent User Interfaces (**IUI 2015**)*. Atlanta, GA. 2015. [Acceptance Rate: 23%]

[C.2] Xiaolong Wu, Malcolm Haynes, Yixin Zhang, Ziyi Jiang, Zhengyang Shen, **Anhong Guo**, Thad Starner, Scott Gilliland. Comparing Order Picking Assisted by Head-up Display Versus Pick-by-light with Explicit Pick Confirmation. In *Proceedings of the 2015 ACM International Symposium on Wearable Computers (**ISWC 2015**)*. Osaka, Japan. 2015. [Acceptance Rate: 25%]

[C.1] **Anhong Guo**, Shashank Raghu, Xuwen Xie, Saad Ismail, Xiaohui Luo, Joseph Simoneau, Scott Gilliland, Hannes Baumann, Caleb Southern, Thad Starner. A Comparison of Order Picking Assisted by Head-up Display (HUD), Cart-mounted Display (CMD), Light, and Paper Pick List. In *Proceedings of the 2014 ACM International Symposium on Wearable Computers (**ISWC 2014**)*. Seattle, WA. 2014. [Acceptance Rate: 25%]
Best Paper Honorable Mention
ISWC 10-Year Impact Award

Posters, Demos, Works in Progress, and Extended Abstracts

[A.11] Gregory Croisdale, John Joon Young Chung, Emily Huang, Gage Birchmeier, Xu Wang, **Anhong Guo**. DeckFlow: A Card Game Interface for Exploring Generative Model Flows. In *Adjunct Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology (**UIST Demo 2023**)*. San Francisco, California. 2023.

[A.10] Ruei-Che Chang, Chia-Sheng Hung, Dhruv Jain, **Anhong Guo**. SoundBlender: Manipulating Sounds for Accessible Mixed-Reality Awareness. In *Adjunct Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology (**UIST Demo 2023**)*. San Francisco, California. 2023.

[A.9] Andi Xu*, Mahdi Qazwini*, Chen Liang, **Anhong Guo**. Deploying VizLens: Characterizing User Needs, Preferences, and Challenges on Physical Interfaces Usage in the Wild. In *Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (**ASSETS Demo 2023**)*. New York, NY, 2023.

[A.8] Cheuk Yin Phipson Lee*, Zhuohao Zhang*, Jaylin Herskovitz, JooYoung Seo, **Anhong Guo**. CollabAlly: Accessible Collaboration Awareness in Document Editing. In *Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (**ASSETS Demo 2021**)*. Virtual Event, 2021.

[A.7] Jaewook Lee, Yi-Hao Peng, Jaylin Herskovitz, **Anhong Guo**. Image Explorer: Multi-Layered Touch Exploration to Make Images Accessible. In *Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (**ASSETS Demo 2021**)*. Virtual Event, 2021.

[A.6] Junhan Kong, **Anhong Guo**, Jeffrey P. Bigham. Supporting Older Adults in Using Complex User Interfaces with Augmented Reality. In *Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (**ASSETS Demo 2019**)*. Pittsburgh, PA. 2019.

[A.5] **Anhong Guo**, Jeffrey P. Bigham. Making Real-World Interfaces Accessible Through Crowdsourcing, Computer Vision, and Fabrication. In *Proceedings of the 14th Web for All Conference (**W4A 2017**)*. Perth, Australia. 2016.
TPG Web Accessibility Challenge Delegates Award

[A.4] **Anhong Guo**, Jeeeun Kim, Xiang 'Anthony' Chen, Tom Yeh, Scott Hudson, Jennifer Mankoff, Jeffrey P. Bigham. Facade: Auto-generating Tactile Interfaces to Appliances. In *Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (**ASSETS Poster 2016**)*. Reno, NV. 2016.

[A.3] Cole Gleason, **Anhong Guo**, Gierad Laput, Kris Kitani, Jeffrey P. Bigham. VizMap: Accessible Visual Information Through Crowdsourced Map Reconstruction. In *Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (**ASSETS Poster 2016**)*. Reno, NV. 2016.

[A.2] Michael Nebeling, **Anhong Guo**, Alexandra To, Steven Dow, Jaime Teevan, Jeffrey P. Bigham. WearWrite: Orchestrating the Crowd to Complete Complex Tasks from Wearables. In *Proceedings of the Symposium on User Interface Software and Technology (**UIST Demo 2015**)*. Charlotte, NC. 2015.

[A.1] **Anhong Guo**, Xiang 'Anthony' Chen, Jeffrey P. Bigham. ApplianceReader: A Wearable, Crowdsourced, Vision-based System to Make Appliances Accessible. In *Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (**CHI WIP 2015**)*. Seoul, Korea. 2015.

Magazine Articles

[M.2] **Anhong Guo**, Jeffrey P. Bigham. Making Everyday Interfaces Accessible: Tactile Overlays by and for Blind People. **IEEE Pervasive Computing** 17.2 (2018).

[M.1] **Anhong Guo**, Xiaolong Wu, Zhengyang Shen, Thad Starner, Hannes Baumann, Scott Gilliland. Order picking with head-up displays. **IEEE Computer** 6 (2015).

Workshop, Symposia, and Consortia Papers

[W.9] **Anhong Guo**, Ece Kamar, Jennifer Wortman Vaughan, Hanna Wallach, Meredith Ringel Morris. Toward Fairness in AI for People with Disabilities: A Research Roadmap. In *ACM ASSETS 2019 Workshop on AI Fairness for People with Disabilities (***ASSETS 2019 AI Fairness Workshop***)*. Pittsburgh, PA. 2019.

[W.8] Danna Gurari, Qing Li, Chi Lin, Yinan Zhao, **Anhong Guo**, Abigale Stangl, Jeffrey P. Bigham. VizWiz-Priv: A Dataset for Recognizing the Presence and Purpose of Private Visual Information in Images Taken by Blind People. *Workshop on Fairness Accountability Transparency and Ethics in Computer Vision at CVPR 2019 (***FATE-CV 2019 Workshop***)*. Long Beach, CA. 2019.

[W.7] Danna Gurari, Qing Li, Chi Lin, Yinan Zhao, **Anhong Guo**, Abigale Stangl, Jeffrey P. Bigham. VizWiz-Priv: A Dataset for Recognizing the Presence and Purpose of Private Visual Information in Images Taken by Blind People. *Workshop on language and vision at CVPR 2019 (***Language and Vision 2019 Workshop***)*. Long Beach, CA. 2019.

[W.6] Danna Gurari, Qing Li, Chi Lin, Yinan Zhao, **Anhong Guo**, Abigale Stangl, Jeffrey P. Bigham. VizWiz-Priv: A Dataset for Recognizing the Presence and Purpose of Private Visual Information in Images Taken by Blind People. *The Bright and Dark Sides of Computer Vision: Challenges and Opportunities for Privacy and Security (***CV-COPS 2019 Workshop***)*. Long Beach, CA. 2019.

[W.5] Danna Gurari, Qing Li, Abigale Stangl, **Anhong Guo**, Chi Lin, Kristen Grauman, Jiebo Luo, Jeffrey P. Bigham. VizWiz Grand Challenge: Answering Visual Questions from Blind People. In *VQA Challenge and Visual Dialog Workshop at CVPR 2018 (***VQA 2019 Workshop***)*. Salt Lake City, Utah. 2018.

[W.4] **Anhong Guo**. Crowd-AI Systems for Non-Visual Information Access in the Real World. In *The 31st Annual ACM Symposium on User Interface Software and Technology Adjunct Proceedings (***UIST 2018 Adjunct Doctoral Symposium***)*. Berlin, Germany. 2018.

[W.3] **Anhong Guo**. Crowd-AI Systems for Non-Visual Information Access in the Real World. In *Proceedings of the 2018 CHI Conference Extended Abstracts on Human Factors in Computing Systems (***CHI 2018 Doctoral Consortium***)*. Montréal, Canada. 2018.

[W.2] Saiganesh Swaminathan, Ting-Hao K. Huang, Irene Lin, **Anhong Guo**, Gierad Laput, and Jeffrey P. Bigham. Epistemo: A Crowd-Powered Conversational Search Interface. In the Talking with Conversational Agents in Collaborative Action Workshop at the *20th ACM conference on Computer-Supported Cooperative Work and Social Computing (***CSCW 2017 Workshop***)*. Portland, OR. 2017.

[W.1] Jeffrey P. Bigham, Erin L. Brady, Cole Gleason, **Anhong Guo**, David A. Shamma. An Uninteresting Tour Through Why Our Research Papers Aren't Accessible. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems (***alt.chi 2016***)*. San Jose, CA. 2016.

Dissertation

[D.1] **Anhong Guo**. Human-AI Systems for Visual Information Access. Ph.D. Dissertation. Human-Computer Interaction Institute, School of Computer Science, Carnegie Mellon University. Pittsburgh, PA. 2020.

Patents

[P.2] Chen Liang, Yasha Iravantchi, Thomas Krolikowski, Ruijie Geng, Alanson Sample, **Anhong Guo**. Hardware Interaction Proxy For Accessing Touchscreens. U.S. Patent Application 18/816,229, filed August 27, 2024.

[P.1] **Anhong Guo**, Junhan Kong, Michael Rivera, Frank F. Xu, Jeffrey P. Bigham. StateLens: A Reverse Engineering Solution for Making Existing Dynamic Touchscreens Accessible. U.S. Provisional Patent Application 19/207, filed June 6, 2019.

Other Publications

[O.1] Michael Nebeling, **Anhong Guo**, Kyle Murray, Annika Tostengard, Angelos Giannopoulos, Martin Mihajlov, Steven Dow, Jaime Teevan, Jeffrey P. Bigham. WearWrite: Orchestrating the Crowd to Complete Complex Tasks from Wearables (We Wrote This Paper on a Watch). *arXiv preprint arXiv:1508.02982 (Computer Science > Human-Computer Interaction)*.

Funding

Since University of Michigan

[G.10] **Advanced Research Projects Agency for Health (ARPA-H)**. PARADIGM: VIGIL–Vectors Of Intelligent Guidance In Long-Reach Rural Healthcare. 11/2024 - 10/2029. Lab Share: $791,738 (Total: $24,595,343). PI: Jason Corso, **Anhong Guo (Co-PI)**.

[G.9] **Google**. Google Academic Research Award. WorldScribe: Context-Aware Live Visual Descriptions for Blind People. 2024 - 2025. Total: $75,000. **Anhong Guo (PI)**.

[G.8] **National Science Foundation (NSF)**. SCH: Multimodal Techniques to Enhance Intra- and Post-operative Learning and Coordination between Attending and Resident Surgeons. 09/2024 - 08/2028. Lab Share: $310,220 (Total: $1,200,000). Xu Wang (PI), Vitaliy Popov (Co-PI), **Anhong Guo (Co-PI)**.

[G.7] **University of Michigan**. Michigan Interactive and Social Computing (MISC) Grant. 2024 - 2025. Total: $15,000. **Anhong Guo (PI)**, Michael Nebeling (PI).

[G.6] **Google**. Google Cloud Platform Credit Award. 2024 - 2025. Total: $15,000. **Anhong Guo (PI)**.

[G.5] **Michigan Engineering**. DEI Faculty Grant. 2023 - 2024. Total: $10,000. **Anhong Guo (PI)**, Stella Yu (PI).

[G.4] **Google**. Google Cloud Platform Credit Award. 2023 - 2024. Total: $30,000. **Anhong Guo (PI)**.

[G.3] **Google**. Google Research Scholar Award. Making Collaborative Augmented Reality Experiences Accessible for People with Visual Impairments. 2022 - 2023. Total: $60,000. **Anhong Guo (PI)**.

[G.2] **Michigan Engineering**. Michigan Seeding to Accelerate Research Themes Funding (START): Designing In-Situ Learning Experiences for Explainable AI. 2022 - 2023. Total: $45,000. **Anhong Guo (PI)**, Xu Wang (PI), Nikola Banovic (PI).

[G.1] **University of Michigan**. Michigan Provost's Early Tenure-Track Faculty Research Support. 2022. Total: $3,000. **Anhong Guo (PI)**.

Prior to University of Michigan

2019 **ASSETS 2019 Best Artifact Award for project X-Ray, $1K**

2018, 2019 **NSF I-Corps @CMU Program for VizLens and Zensors, $5K**

2018 **CMU Swartz Innovation Fellowship, $50K**

2018 **McGinnis Venture Capital Award, $25K**

2018 **CHI 2018 Doctoral Consortium Travel Grants, $4K**

2018 **UIST 2018 Doctoral Symposium Travel Grant, $2K**

2017 **Snap Inc. Research Fellowship, $10K**

2017   ACM SIGACCESS Student Scholar Travel Grant for Turing Award 50 Event, $2K

2016   **Semifinalist in Hackaday Prize, Assistive Technology for project Facade, $1K**

2014   **Ubicomp/ISWC 2014 Student Travel Grant, $.5K**

2013   **Georgia Tech GVU International Student Travel Grant, $.5K**

Professional Experience

05/2019 –   **Microsoft Research, Redmond**
12/2019   Research Intern in the Ability Group with Meredith Ringel Morris
Collaborated with Ece Kamar, Jennifer Wortman Vaughan, and Hanna Wallach
Investigated fairness issues of AI systems for people with disabilities [W.9]
Investigated people with physical disabilities' experiences with sensing systems [C.21]
Investigated challenges and tradeoffs in evaluating face recognition systems for fairness [C.24]

2017 – 2018   **Zensors Inc.**
Founding Member of startup to unleash visual sensing and turn video data into business insights [C.14]

05/2018 –   **Snap Research, Venice**
12/2018   Research Intern in the HCI Group with Rajan Vaish and Andrés Monroy-Hernández
Developed Blocks: collaborative and persistent augmented reality experiences [C.18]

05/2017 –   **Google Research, Mountain View**
08/2017   Research Intern in the Accessibility Engineering Team with Yu Zhong and Yang Li
Developed cursor-based interactions to support non-visual exploration [C.13]

05/2015 –   **Microsoft Research, Redmond**
08/2015   Research Intern in the Intelligent User Experience Group with Tim Paek
Developed tilt-based techniques for no-touch, wrist-only interactions on smartwatches [C.8]

05/2013 –   **SAP America, Atlanta**
07/2013   UX Designer and Developer Intern in the Mobile Innovation Center with Jonathan Zufi and Jeff Collier
Designed and developed a highly sophisticated, strategic and critical concept application for Costco's consumers, which involved advanced graphics, cloud integration, and offline requirements
Re-branded apps for Delta, FedEx, Lowe's, Kimberly Clark, etc. by modifying design and code, using the Apple app build system with Perforce, Git and Maven

07/2011 –   **Qihoo 360, Beijing**
09/2011   Product Manager Intern in the Mobile Internet Division with Sean Ma and Howard Hu
Designed an automatic response system to collect feedback and offer customer service by employing natural language processing and knowledge database establishment technologies
Conducted competitive analysis and feedback analysis to optimize UI and text of the Instant Messaging Product KouXin

Teaching

Instructor – EECS 493 User Interface Development (Undergraduate)
Electrical Engineering and Computer Science, University of Michigan
Winter 2021, Fall 2021, Fall 2022, Winter 2024, Fall 2024

Instructor – CSE 594 Human-AI Interaction & Systems (Graduate)
Computer Science and Engineering, University of Michigan
Winter 2022, Winter 2023, Winter 2025

Teaching Assistant

Fall 2018   **Co-Instructor – Weekly Recitation of HCII 05610: User Centered Research & Evaluation**
School of Computer Science, Carnegie Mellon University

Spring 2018   **Teaching Assistant – HCII 05899: Accessibility Project Course**
School of Computer Science, Carnegie Mellon University

Spring 2017 **Teaching Assistant – HCII 05391: Designing Human-Centered Systems**
School of Computer Science, Carnegie Mellon University

Spring 2016 **Teaching Assistant – HCII 05899: Crowd Programming**
School of Computer Science, Carnegie Mellon University

Invited Talks and Presentations

03/2025 **Personal Assistive Technology**
University of Chicago (Host: Pedro Lopes)

03/2025 **Personal Assistive Technology**
Northwestern University (Host: Karan Ahuja)

02/2025 **Personal Assistive Technology**
Michigan HCC Seminar, University of Michigan Human-Centered Computing Lab

02/2025 **Personal Assistive Technology**
Stanford HCI Seminar, Stanford University (Host: Michael Bernstein)

01/2025 **Personal Assistive Technology**
Michigan AI Seminar, University of Michigan Artificial Intelligence Lab

11/2024 **AI-powered Visual Assistive Technologies from the UMich Human-AI Lab**
State of Michigan, Department of Technology, Management & Budget (DTMB)

06/2024 **AI-powered Visual Assistive Technologies from the UMich Human-AI Lab**
Ann Arbor District Library, VISIONS 2024

10/2023 **Human-AI Systems for Accessibility: Use, Customize, and Create**
University of California Berkeley, Berkeley Institute of Design (BiD) (Host: Björn Hartmann)

10/2023 **Human-AI Systems for Accessibility: Use, Customize, and Create**
Cornell Tech (Host: Shiri Azenkot)

10/2023 **Human-AI Systems for Accessibility: Use, Customize, and Create**
Guest Lecture, Advanced Accessibility Course (Host: Dhruv Jain)

08/2023 **Human-AI Systems for Accessible Immersion**
Lightning Talk, Google Fairness in Datasets for Machine Learning in Accessibility Workshop

11/2022 **Human-AI Systems for Accessibility**
University of California, Santa Barbara, Guest Lecture, Future User Interfaces Course (Host: Misha Sra)

11/2022 **Human-AI Systems for Accessibility**
Guest Lecture, Graduate Human-Computer Interaction Course (Host: Nikola Banovic)

09/2022 **Panel on Critical Perspectives on Algorithmic Fairness**
Panelist, U-M Algorithmic Reparation Workshop

08/2022 **Human-AI Systems for Accessibility**
Invited Talk, U-M CS KickStart

06/2022 **Human-AI Systems for Accessibility**
Invited Talk, Google Lookout Team (Host: Scott Adams)

11/2021 **Human-AI Systems for Accessibility**
Guest Lecture, Graduate Human-Computer Interaction Course (Host: Nikola Banovic)

10/2021 **Human-AI Systems for Visual Information Access**
Guest Lecture, Human-Centered Computing Research (Host: Toby Jia-Jun Li)

10/2021 **Human-AI Systems for Accessibility**
Invited Talk, U-M CDHW Disability Research Symposium

04/2021 **Human-AI Systems for Accessibility**
Accessibility Course, Carnegie Mellon University (Host: Patrick Carrington)

04/2021 **HCI-ML Expert Panel**
HCI for ML Course, University of Illinois at Urbana-Champaign (Host: Ranjitha Kumar)

04/2021 **Human-AI Systems for Accessibility**
Accessibility & AI Design Workshop, Facebook (Host: Yao Ding)

11/2020 **Toward Fairness in AI for People with Disabilities**
Introduction to Accessibility Course, University of Michigan (Host: Robin Brewer)

11/2020 **Toward Fairness in AI for People with Disabilities**
Future of Work and Disability Panel, OCAD University (Host: Jutta Treviranus)

10/2020 **Human-AI Systems for Visual Information Access**
Invited Talk, Michigan AI Symposium

08/2020 **Human-AI Systems for Visual Information Access**
Guest Lecture, Mercari R4D (Host: Bektur Ryskeldiev)

Spring 2020 **Human-AI Systems for Visual Information Access**
University of Illinois at Urbana-Champaign, Department of Computer Science
University of Wisconsin-Madison, Department of Computer Sciences
Microsoft Research, Ability Group
University of Michigan, Computer Science and Engineering
University of Virginia, Department of Computer Science
Massachusetts Institute of Technology, Department of Electrical Engineering and Computer Science
University of Pittsburgh, School of Computing and Information
University of Rochester, Department of Computer Science
University of Toronto, Department of Computer Science
Simon Fraser University, School of Computing Science
Purdue University, Department of Computer Science

04/2020 **Human-AI Systems for Visual Information Access**
Crowdsourcing & Crowd-AI Systems Course, Pennsylvania State University (Host: Kenneth Huang)

03/2020 **Human-AI Systems to Make Physical Interfaces Accessible**
Harvard Center for Research on Computation and Society (CRCS) Workshop on AI for Social Impact

11/2019 **Human-AI Systems for Visual Information Access**
Human Factors Course, Carnegie Mellon University (Host: Laura Dabbish)

11/2019 **Human-AI Systems for Visual Information Access**
Robots Perceiving and Doing (R-PAD) Seminar, Carnegie Mellon University (Host: David Held)

10/2019 **Human-AI Systems for Visual Information Access**
Guest Lecture, Texas A&M University (Host: Jeeeun Kim)

07/2019 **Fairness in AI for People with Disabilities**
HCI Lunch Talk Series, Microsoft Research Redmond

07/2019 **Human-AI Systems for Visual Information Access**
DUB Seminar, University of Washington (Host: Leah Findlater, Richard Ladner)

04/2019 **Crowd-AI Systems for Making Physical Interfaces Accessible**
Edge Computing Seminar, Carnegie Mellon University (Host: Mahadev Satyanarayanan)

03/2019 **Crowd-AI Systems for Accessing Visual Information in the Real World**
HCI Group, University of California, Los Angeles (Host: Xiang 'Anthony' Chen)

04/2018 **Crowd-AI Systems for Accessing Visual Information in the Real World**
Computational Ethics for NLP, Carnegie Mellon University (Host: Yulia Tsvetkov and Alan W. Black)

06/2017 **Making Real-World Interfaces Accessible Through Crowdsourcing, Vision, and Fabrication**
Invited Talk, Google Accessibility Engineering (Host: Yu Zhong and Ken Goldman)

07/2015 **Exploring Tilt for No-Touch, Wrist-Only Interactions on Smartwatches**
HCI Lunch Talk Series, Microsoft Research Redmond

Advising and Mentoring

PhD Advisees

2022 – **Ruei-Che Chang (Computer Science and Engineering, University of Michigan)**
Apple Scholars in AI/ML PhD fellowship, 2025-2027
Weinberg Cognitive Science Fellowship, 2024
Rackham International Student Fellowship, 2023-2024

2021 – **Chen Liang (Computer Science and Engineering, University of Michigan)**
CSE Outstanding Graduate Student Instructor Award, 2023

2021 – **Jaylin Herskovitz (Computer Science and Engineering, University of Michigan)**
Susan Lipschutz Award for Rackham Graduate Students, 2025
CSE Service Award for Excellence in Climate and DEI, 2023
NSF Graduate Research Fellowship, 2022-2024

2021 – 2024 **Lei Zhang (School of Information, University of Michigan)**
Co-advised with Steve Oney
Dissertation: Designing End-user Creation Tools for Immersive Experiences
Now: Assistant Professor at New Jersey Institute of Technology (NJIT) Department of Informatics

Postdoctoral Fellow

2024 – **Rosiana Natalie**
Ph.D. from Singapore Management University, advised by Kotaro Hara
Michigan Institute for Data and AI in Society (MIDAS) Data Science Postdoctoral Fellow

Thesis Committees (Ph.D.)

2023 **Mauli Pandey (School of Information, University of Michigan)**
Dissertation: Accessibility of Collaborative Programming for Blind and Visually Impaired Developers

2023 **Matthew Perez (Computer Science and Engineering, University of Michigan)**
Dissertation: Machine Learning Approaches for Quantitative Analysis and Characterization of Pathological Speech Disorders

2023 **Stephan J. Lemmer (Robotics, University of Michigan)**
Dissertation: Hazy Oracles in Deep Learning

2023 **John Joon Young Chung (Computer Science and Engineering, University of Michigan)**
Dissertation: Steerable AI-powered Art-making Tools

2022 **Rebecca Krosnick (Computer Science and Engineering, University of Michigan)**
Dissertation: Improving Web Automation Tools through UI Context and Demonstration

2022 **Vaishnav Kameswaran (School of Information, University of Michigan)**
Dissertation: Help Facilitates Accessibility: Understanding the Social and Technology-mediated Experiences of People with Visual Impairments in India

Thesis Committees (M.S.)

2022 – 2024 **Gregory Croisdale (Computer Science and Engineering, University of Michigan)**
"DeckFlow: An Infinite Image Generation Canvas with Input Specifications to Support Multi-Modal Prompt Design"
Co-advised with Xu Wang
Rackham Merit Fellowship, 2022

2023 – 2024 **Emily Huang (University of Michigan)**
"DeckFlow: An Infinite Image Generation Canvas with Input Specifications to Support Multi-Modal Prompt Design"

2020 – 2021 **Chen Liang (Texas A&M University)**
"An Interactive System to Support the Exploration and Measurement of Adaptive 3D Designs"
First position: Ph.D. student at UMich CSE

Visiting Scholars

2023 **Rosiana Natalie (Singapore Management University)**
"The Efficacy of Audio Description Customization for Blind and Low Vision People"

Master's Students

2021 – 2022 **Ruei-Che Chang (National Taiwan University)**
First position: Ph.D. student at UMich CSE

2020 – 2021 **Zhuohao Zhang (University of Illinois at Urbana-Champaign)**
First position: Ph.D. student at the University of Washington iSchool

2020 – 2021 **Cheuk Yin Phipson Lee (Carnegie Mellon University)**
First position: Apple AR Team

2017 – 2020 **Junhan Kong (Carnegie Mellon University)**
First Position: Ph.D. student at the University of Washington iSchool

2019 **Frank F. Xu (Shanghai Jiao Tong University)**
First Position: Ph.D. student at the Language Technologies Institute of Carnegie Mellon University

2019 **Runchang Kang (Carnegie Mellon University)**
First Position: Software Development Engineer at iRobot

2017 **Anuraag Jain (Carnegie Mellon University)**
First Position: Founder at Zensors Inc.

2016 **Haoran Qi (Carnegie Mellon University)**
First Position: Software Engineer at Google

2013 – 2016 **Xiaolong Wu (Georgia Institute of Technology)**
First Position: iOS Software Engineer at FitBit

Undergraduate Students

2024 – **Ellie Seehorn (Grinnell College)**

2023 – **Yuxuan Liu (University of Michigan)**

2023 – **Jin Pan (University of Michigan)**
First Position: Master's student at the University of Wisconsin-Madison

2023 **Jacob Gettig (University of Michigan)**

2023 **Gerrard (Hyung Yul) Choe (University of Michigan)**

2023 **Qiyuan Song (University of Michigan)**

2023 **Gage Birchmeier (University of Michigan)**
First Position: Ph.D. student at the University of Kentucky CS

2023 **Sirui Zhan (University of Michigan)**

2023 **Samantha Au (University of Michigan)**

2023 **Bella Palumbi (University of Michigan)**

2023 **Zaizhe Liu (University of Michigan)**
First Position: Master's student at the University of Southern California

2022 – **Linfeng (Oscar) Song (University of Michigan)**
First Position: Master's student at the University of Pennsylvania

2022 – **Andi Xu (University of Michigan)**
CRA Outstanding Undergrad Researcher Award Runner Up
First Position: Master's student at Stanford University

2022 – 2023 **Minyu Cai (University of Michigan)**
First Position: Master's student at Carnegie Mellon University

2022 – 2023 **Dier Hou (University of Michigan)**
First Position: Master's student at the University of California, San Diego

2022 – 2023 **Tao Lu (University of Michigan)**
First Position: Master's student at Georgia Institute of Technology

2022 – 2023 **Haocheng (Leo) Ren (University of Michigan)**
First Position: Master's student at the University of Michigan

2022 – 2023 **Muzhe Wu (University of Michigan)**
First Position: Master's student at Carnegie Mellon University

2022 – 2023 **Tianying (Dannie) Zhang (University of Michigan)**
First Position: Software Engineer at Amazon

2022 – 2023 **Hongxiao Zheng (University of Michigan)**
First Position: Master's student at Dartmouth College

2022 **Gabriela Lopez-Salgado (University of Michigan)**

2022 **Chenhao Zheng (University of Michigan)**
First Position: Ph.D. student at the University of Washington CSE

2021 – 2023 **Mahdi Qazwini (University of Michigan)**
First Position: Software Engineer at Akuna Capital

2021 **Yatharth Chhabra (University of Michigan)**
First Position: Master's student at the University of Michigan

2020 – 2021 **Jaewook Lee (University of Illinois at Urbana-Champaign)**
First position: Ph.D. student at the University of Washington CSE

2020 **Dena Sabha (University of Washington)**
First Position: Designer at Disney

2018 **Hannah Murphy (Wellesley College)**
First Position: Software Engineer at Microsoft

2018 **Emily Porat (Carnegie Mellon University)**
First Position: UX Designer at Deloitte Digital

2016 – 2017 **Ronnie Shomiron Ghose (Carnegie Mellon University)**
First Position: Software Engineer at Salesforce.com

2015 **Suman Ghosh (Jadavpur University)**
First Position: Master's student at the University of Genoa

2014 **Joan Chen (Georgia Institute of Technology)**
First Position: Security Architect at Morgan Stanley

2014 **Kelcy Newton (Georgia Institute of Technology)**
First Position: Software Engineer at Microsoft

Other Mentoring

2018 **Codetalk program with St. Joseph Center and Snap Inc.**
Help low income, underemployed and underserved women pursue entry level positions in the tech sector

Service

Organizing Committee
ACM UIST Doctoral Symposium Chair 2023, 2024
Michigan AI Symposium General Chair 2022, 2023
ACM CHI E-Rights Chair 2022
ACM UIST Proceedings Chair 2021, 2022
AAAI HCOMP CrowdCamp Chair 2022
ACM ASSETS Web Chair 2019

Program Committee
ACM CHI 2022, 2023, 2024, 2025
ACM UIST 2020, 2021, 2022, 2024, 2025
ACM ASSETS 2020, 2021, 2022, 2023, 2024, 2025
ACM WWW 2023
ACM IUI 2019, 2020, 2021
ACM FAccT 2021
ACM CHI Late Breaking Work 2019
ACM COMPASS 2018, 2019

Session Chair
CHI 2024 Session: Universal Accessibility
ASSETS 2023 Session: AI and Automation
UIST 2022 Session: Information and Visualization Interfaces
CHI 2022 Session: Technologies to Support Accessibility
ASSETS 2021 Session: AI and Accessibility
UIST 2021 Session: Understanding and Modifying UI
CHI 2021 Session: Affection and Support in a Digital World
ASSETS 2020 Session: Tangible Interaction
UIST 2020 Session: Transcribing Words and Directing Voice
CHI 2018 Session: Accessible Interaction Techniques
CHI 2017 Session: Learning and Reading

2021 – **University of Michigan**
Faculty Hiring Committee, Computer Science and Engineering
Graduate Program Committee, Computer Science and Engineering

2018 – 2020 **Carnegie Mellon University**
PhD Admissions Committee student representative, Human-Computer Interaction Institute
Faculty Hiring Committee student representative, Human-Computer Interaction Institute

Reviewer
CHI '15 '16 '17 '18 '19 '20* '21 '22 '23* '24* '25*, UIST '16 '17 '18 '19 '20 '21 '22* '24*, Ubicomp (IMWUT) '15 '16 '17 '18 '19 '21 '24, CSCW '21, IUI '15 '19, MobileHCI '17 '18 '19, ISWC '15 '18 '19, DIS '20 '22, TEI '19, GI '16, VRST '21, JAIR, TACCESS, IJHCS, etc.
*Special Recognition for Excellent Review

Student Volunteer
CHI 2016 San Jose, CA
Ubicomp/ISWC 2013 Zurich, Switzerland
Ubicomp 2011 Beijing, China
Vice President of the Volunteer Association at BUPT

Selected Press Coverage

02/2025 **University of Michigan News.** "Bridging gaps in rural health care with AI-powered mobile clinics"

02/2025 **University of Michigan Engineering News.** "Bridging gaps in rural health care with AI-powered mobile clinics"

10/2024 **University of Michigan News.** "Real-time descriptions of surroundings for people who are blind"

10/2024 **University of Michigan Engineering News.** "Real-time descriptions of surroundings for people who are blind"

10/2024 **Newswise.** "Real-time descriptions of surroundings for people who are blind"

10/2024 **myScience.** "Real-time descriptions of surroundings for people who are blind"

10/2024 **AAAS EurekAlert!.** "Real-time descriptions of surroundings for people who are blind"

10/2024 **Mirage.News.** "Real-Time Surroundings Aid for Blind"

10/2024 **Tech Xplore.** "AI-powered software narrates surroundings for visually impaired in real time"

10/2024 **Health Tech World.** "AI tool gives blind person 'picture of the real world'"

10/2024 **NewsGram.** "Real-Time Descriptions of Surroundings for People Who Are Blind"

06/2024 **HoffPost.** "Doing This 1 Very Simple Thing Will Help You To Drastically Cut Down Screen Time"

05/2024 **University of Michigan News.** "Managing screen time by making phones slightly more annoying to use"

05/2024 **University of Michigan Engineering News.** "Managing screen time by making phones slightly more annoying to use"

05/2024 **University of Michigan CSE News.** "Managing screen time by making phones slightly more annoying to use"

05/2024 **Futurity.** "Making your phone annoying may get you to cut screen time"

05/2024 **News-Medical.net.** "Research reveals effective strategies for reducing smartphone addiction"

05/2024 **Today Headline.** "Managing screen time by making phones slightly more annoying to use"

05/2024 **Tech Xplore.** "Managing screen time by making phones slightly more annoying to use"

05/2024 **News8Plus.** "Managing screen time by making phones slightly more annoying to use"

05/2024 **Cybernews.** "Use this app to get annoyed and drop your phone to reduce screen time"

05/2024 **Digital Information World.** "Study Finds Making Phones More Annoying Helps Reduce Screen Time by 16 Percent"

05/2024 **NewsBytes.** "Scientists create app to annoy users into reducing smartphone usage"

05/2024 **Smartphone Magazine.** "Innovative App Reduces Screen Time Better than Full Blockouts"

05/2024 **myScience.** "Managing screen time by making phones slightly more annoying to use"

11/2023 **World Economic Forum.** "This smartphone tool helps people with visual disabilities use touchscreens"

11/2023 **ACM TechNews.** "Phone Case Provides Workaround for Inaccessible Touch Screens"

10/2023 **University of Michigan News.** "New phone case provides workaround for inaccessible touch screens"

10/2023 **University of Michigan Engineering News.** "New phone case provides workaround for inaccessible touchscreens"

10/2023 **University of Michigan CSE News.** "New phone case provides workaround for inaccessible touchscreens"

10/2023 **Arduino.** "Tapping without seeing: Making touchscreens accessible"

10/2023 **Independent Living.** "Smartphone case workaround"

10/2023 **New Atlas.** "BrushLens tech could make touchscreen displays accessible to everyone"

10/2023 **Hackster.io.** "Bring Your Own Accessibility"

10/2023 **Futurity.** "'BrushLens' Smartphone Case Boosts Touchscreen Accessibility"

10/2023 **Tech Xplore.** "New phone case provides workaround for inaccessible touch screens"

10/2023 **sciencenewsnet.in.** "New phone case provides workaround for inaccessible touch screens"

10/2023 **Mirage.News.** "New Phone Case Offers Solution for Hard-to-Reach Screens"

10/2023 **News8Plus.** "New phone case provides workaround for inaccessible touch screens"

10/2023 **Opp.Today.** "New Smartphone Case Makes Touch Screens More Accessible for Users with Disabilities"

10/2023 **CanIndia.** "Affordable smartphone case provides workaround for inaccessible touch screens"

10/2023 **myScience.** "New phone case provides workaround for inaccessible touch screens"

10/2023 **Siasat Daily.** "Affordable smartphone case provides workaround for inaccessible touch screens"

10/2023 **ap7am.com.** "Affordable smartphone case provides workaround for inaccessible touch screens"

10/2023 **Knowridge.** "New phone case makes touch screens easy for everyone"

10/2023 **The Messenger Tech.** "Experimental Phone Case Acts Like Digital Magnifying Lens for Touchscreens"

06/2023 **Cool Blind Tech.** "These apps empower visually impaired users with virtual labels and image exploration"

06/2023 **Partners For Sight.** "New Apps Provide Virtual Labels for Controls and a Way to Explore Images"

06/2023 **Tech Xplore.** "New apps for visually impaired users provide virtual labels for controls and a way to explore images"

06/2023 **DBusiness Magazine.** "New Apps for Visually Impaired Users Provide Virtual Labels to Explore Images"

06/2023 **University of Michigan News.** "New apps for visually impaired users provide virtual labels for controls and a way to explore images"

06/2023 **University of Michigan Engineering Research News.** "New apps for visually impaired users provide virtual labels for controls and a way to explore images"

06/2023 **University of Michigan CSE News.** "New apps for visually impaired users provide virtual labels for controls and a way to explore images"

05/2022 **University of Michigan CSE News.** "Making collaborative online document editing accessible to blind users"

04/2022 **University of Michigan CSE News.** "Designing more accessible augmented reality for people with visual impairments"

12/2020 **University of Michigan CSE News.** "Incoming faculty Anhong Guo named one of Forbes' 30 Under 30 in Science"

12/2020 **Detroit Free Press.** "Young Michigan experts make Forbes's annual 30 under 30 list"

12/2020 **CMU SCS News.** "Forbes Names Guo Among '30 Under 30' Outstanding Young Scientists"

12/2020 **Forbes.** "Forbes 30 Under 30 2021: Science"

12/2019 **El País Economía.** "Ethics – Decisions based on artificial intelligence do not know (or do not want to) address disability."

04/2019 **IEEE Computer Society.** "How the Blind Point a Smartphone at Everyday Control Panels—and Hear Prompts on Which of Those Microwave Buttons to Push. They Can Even Order Up Braille Labels."

09/2018 **CMU HCII News.** "Three from HCII named 2018-19 Innovation Fellows"

03/2018 **Pittsburgh Business Times.** "AI startup wins McGinnis Venture Competition"

02/2018 **MIT Tech Review.** "A new data trove could teach computers to tell blind people what they need"

02/2018 **PittsburghPA.gov.** "City Announces Third Cohort of PGH Lab Startup Program"

02/2018 **GeekWire.** "These 8 Pittsburgh-area startups make up the city-backed PGH Lab incubator"

02/2018 **TribLIVE.** "PGH Lab announces third cohort of startup partnerships"

05/2017 **CMU HCII News.** "3D Printing Project, Façade, presented this week at CHI"

02/2017 **Perkins School for the blind eLEARNING.** "VizLens: iOS Appliance App"

02/2017 **VisionAware.** "Making Touch Controls Accessible"

01/2017 **Cool Blind Tech.** "VizLens Helps The Blind Operate Appliances With Digital Screens And Unlabeled Physical Buttons"

01/2017 **American Foundation for the Blind.** "VizLens and HALOS: Making Touchscreen Appliances and Other Devices More Blind Friendly"

01/2017 **MSWorld.** "Microwave Keypad App and Keypad for the Blind and Visual Difficulties"

10/2016 **E-Access Bulletin Live.** "Hacking for good: the Hackaday Assistive Technology Prize winners in their own words"

10/2016 **CMU HCII News.** "VizLens – An Interactive Smartphone App for the Blind"

09/2016 **CMU HCII News.** "Guo Receives Honorable Mention at MobileHCI 2016"

12/2013 **WABE 90.1FM.** "Cycling in Atlanta Is Gaining Momentum"

05/2013 **The Chattanoogan.com.** "Georgia Highway Safety Officials, Bicycle Advocates Call For Safer Cycling Year In 2013"

05/2013 **Georgia Tech News.** "Making Atlanta a Better Place to Ride"

05/2013 **Channel 2's People 2 People.** "Cycle Atlanta App"

12/2012 **Georgia Tech News.** "There's an app for that. Tackling Atlanta's Transit Conundrum"

12/2012 **Phys.org.** "Cycling app that tracks riders' routes to assist city of Atlanta"

12/2012 **Creative Loafing.** "City, Georgia Tech roll out CycleAtlanta bicycling app"

12/2012 **Georgia Tech News.** "Georgia Tech Cycling App to Assist City of Atlanta"

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