LOTUS ZHANG

University of Washington, Seattle WA Human Centered Design & Engineering

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RESEARCH INTERESTS

Human-Computer Interaction; Accessibility; Human-Centered AI; Creativity Support

My research takes an interdisciplinary approach to advance Al-driven innovations that empower accessible creativity. I combine quantitative rigor, qualitative depth, participatory approach, and system prototyping to inform technology design that truly supports the end users.

EDUCATION

09/2019 - 03/2026	University of Washington, Seattle
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Ph.D. in Human Centered Design & Engineering

Advisor: Leah Findlater

Committee: Jacob O. Wobbrock, Julie Kientz, and Maya Cakmak

09/2019 - 05/2021 University of Washington, Seattle

M.S. in Human Centered Design & Engineering

01/2014 - 05/2019 University of British Columbia, Vancouver

B.A. in Computer Science and Psychology

PROFESSIONAL EXPERIENCE

09/2025 - 10/2025 Microsoft Research, Redmond

Usability Researcher EPIC Lab

06/2024 - 09/2024 Google, San Francisco

UX Researcher Internship, *Products for All*

06/2020 - 09/2020 **Meta, Seattle**

Quantitative UX Researcher Internship, Community Integrity

06/2018 - 09/2018 University of Michigan, Ann Arbor

Research Assistant Information Interaction Lab

09/2016 - 05/2018 University of British Columbia, Vancouver

Research Assistant SPIN Lab

01/2016 - 05/2016 **Axka Group Inc., Richmond**

UX Developer Internship

PUBLICATIONS

Peer-reviewed Full-Paper Conference Publications

VizXpress: Towards Expressive Visual Content by Blind Creators Through Al Support

Lotus Zhang, Zhuohao (Jerry) Zhang, Gina Clepper, Franklin Mingzhe Li, Patrick Carrington, Jacob O. Wobbrock, Leah Findlater

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), 18 pages, October 2025.

"Before, I Asked My Mom, Now I Ask ChatGPT": Visual Privacy Management with Generative AI for Blind and Low-Vision People

Tanusree Sharma, Yu-Yun Tseng, **Lotus Zhang**, Ayae Ide, Kelly Avery Mack, Leah Findlater, Danna Gurari, Yang Wang

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), 21 pages, October 2025.

BIV-Priv-Seg: Locating Private Content in Images Taken by People With Visual Impairments

Yu–Yun Tseng, Tanusree Sharma, **Lotus Zhang**, Abigale Stangl, Leah Findlater, Yang Wang IEEE/CVF Winter Conference on Applications in Computer Vision (WACV), 15 pages, March 2025.

EditScribe: Non-Visual Image Editing with Natural Language Verification Loops

Ruei-Che Chang, Yuxuan Liu, Lotus Zhang, Anhong Guo

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), 19 pages, October 2024.

C.09 Designing Accessible Obfuscation Support for Blind Individuals' Visual Privacy Management

Lotus Zhang, Abigale Stangl, Tanusree Sharma, Yu-Yun Tseng, Inan Xu, Danna Gurari, Yang Wang, Leah Findlater

ACM Conference on Human Factors in Computing Systems (CHI), 27 pages, April 2024.

C.08 Understanding digital content creation needs of blind and low vision people

Lotus Zhang, Simon Sun, Leah Findlater

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), 15 pages, October 2023. Best Paper Honorable Mention

C.07 Disability-first design and creation of a dataset showing private visual information collected with people who are blind

Tanusree Sharma, Abigale Stangl, <u>Lotus Zhang</u>, Yu-Yun Tseng, Inan Xu, Leah Findlater, Danna Gurari, Yang Wang

ACM Conference on Human Factors in Computing Systems (CHI), 15 pages, April 2023.

C.06 Understanding visual arts experiences of blind people

Franklin Mingzhe Li*, <u>Lotus Zhang*</u>, Maryam Bandukda, Abigale Stangl, Kristen Shinohara, Leah Findlater, Patrick Carrington

ACM Conference on Human Factors in Computing Systems (CHI), 21 pages, April 2023. * Equal Contribution

Exploring interactive sound design for auditory websites

Lotus Zhang, Jingyao Shao, Augustina Ao Liu, Lucy Jiang, Abigale Stangl, Adam Fourney, Meredith Ringel Morris, Leah Findlater

ACM Conference on Human Factors in Computing Systems (CHI), 16 pages, April 2022.

C.04 Public versus private: How teens perceived teen-robot interactions in a school setting

Katelynn Oleson, Elin A Björling, Lotus Zhang, Heba Dwikat

ACM/IEEE International Conference on Human-Robot Interaction (HRI), 4 pages, March 2022.

C.03 MRAT: The mixed reality analytics toolkit

Michael Nebeling, Maximilian Speicher, Xizi Wang, Shwetha Rajaram, Brian D Hall, Zijian Xie, Alexander RE Raistrick, Michelle Aebersold, Edward G Happ, Jiayin Wang, Yanan Sun, Lotus Zhang, Leah E Ramsier, Rhea Kulkarni

ACM Conference on Human Factors in Computing Systems (CHI), 16 pages, April 2020. Best Paper Award

Input Accessibility: A Large Dataset and Summary Analysis of Age, Motor Ability and Input Performance.

Leah Findlater, Lotus Zhang

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), 6 pages, October 2020 Best Paper Award

Is it happy? Behavioural and narrative frame complexity impact perceptions of a simple furry robot's emotions

Paul Bucci, Lotus Zhang, Xi Laura Cang, Karon E MacLean

ACM Conference on Human Factors in Computing Systems (CHI), 11 pages, April 2018.

Peer-reviewed Journal Publications

Social Media through Voice: Synthesized Voice Qualities and Self-presentation

Lotus Zhang, Lucy Jiang, Nicole Washington, Augustina Ao Liu, Jingyao Shao, Adam Fourney, Meredith Ringel Morris, Leah Findlater

ACM: Human-Computer Interaction, Computer Supported Cooperative Work and Social Computing (CSCW 2021), 21 pages, April 2021.

Posters, Workshops, and Other Reviewed Publications

The Accessibility, Security, and Privacy Nexus: Trends and Opportunities

<u>Lotus Zhang</u>, Lucy Jiang, Nicole Washington, Augustina Ao Liu, Jingyao Shao, Adam Fourney, Meredith Ringel Morris, Leah Findlater

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), October 2025.

P.05 The Accessibility, Security, and Privacy Nexus: Trends and Opportunities

<u>Lotus Zhang</u>, Lucy Jiang, Nicole Washington, Augustina Ao Liu, Jingyao Shao, Adam Fourney, Meredith Ringel Morris, Leah Findlater

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), October 2025.

P.04 Creation, Critique, and Consumption: Exploring Generative AI Descriptions for Supporting Blind and Low Vision Professionals with Visual Tasks

Lucy Jiang, Lotus Zhang, Leah Findlater

Workshop Paper. ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), October 2025.

P.03 Designing accessible content creation support with blind and low vision creators <u>Lotus Zhang</u>

Doctoral Consortium. ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), October 2023.

P.02 Bridging the gap: Towards advancing privacy and accessibility

Rahaf Alharbi, Robin N Brewer, Gesu India, <u>Lotus Zhang</u>, Leah Findlater, Yixin Zou, Abigale Stangl Accepted Workshop Proposal. ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), October 2023.

P.01 Infusing cuddlebits with emotion: Build your own and tell us about it

Lotus Zhang, Paul Bucci, Xi Laura Cang, Karon MacLean

Extended Abstracts. ACM Conference on Human Factors in Computing Systems (CHI), April 2018.

AWARDS & HONORS

2023 Best Paper Honorable Mention

Publication [C.08]: ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)

2020 Best Paper Award

Publication [C.02]: ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)

2020 Best Paper Award

Publication [C.03]: ACM Conference on Human Factors in Computing Systems (CHI)

John Alexander McDonald Scholarship in Humanities

2017 UBC Computer Science Student Service Award

2014 UBC Outstanding International Student Award

TEACHING

University of Washington

2021	Teaching Assistant - Experimental Research Methods
2020	Co-Instructor - Directed Research Group: Current Trend in Accessibility Research

University of British Columbia

2018 **Teaching Assistant** - Computer Graphics

2017 **Teaching Assistant** - Introduction to HCI Methods

Mentoring

2019 Lucy Jiang - Now PhD student at UW

2022 Simon Sun - Now product designer at Jama Software

COMMUNITY SERVICE

Reviewer

ACM CSCW: 2021

ACM CHI: 2023, 2024*, 2025, 2026*

ACM IDC: 2023 ACM HRI: 2022

ACM SIGACCESS: 2023, 2024

2021 DUB Student Coordinator

2018 Student Volunteer: ACM CHI

INVITED TALKS

2025	Best-Only Scaling: An Accessible Alternative to MaxDiff Surveys

Quant UX Conference 2025 Worldwide

2025 VizXpress: Towards Expressive Visual Content by Blind Creators Through Al Support

Paper Presentation for ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)

Expressive Visual Content by Blind Creators

UW CREATE Project Showcase

2024 Designing Accessible Obfuscation Support for Blind Individuals' Visual Privacy Management

Paper Presentation for ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)

2023 Designing Accessible Co-creative Tools with Blind and Low Vision Creators

Doctoral Consortium Talk at ASSETS 2023

2023 Accessibility Research & Blind Creativity

Introduction to HCI guest lecture at University of Toronto

Exploring Interactive Sound Design for Auditory Websites

Paper Presentation for ACM CHI

2021 Social Media through Voice: Synthesised Voice Qualities and Self-presentation

Paper Presentation for ACM CSCW

^{*}Special Recognition for Outstanding Review