Zhuohao Zhang

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Research Interest

HCI (Accessibility, Social Computing, Usable Privacy and Security, CSCW), AI (Human-AI Interaction)

Education

2019-2021 University of Illinois at Urbana-Champaign (UIUC), Urbana, IL

M.S. in Computer Science (with thesis), GPA: 4.0/4.0

Advisor: Yang Wang

2015-2019 Zhejiang University (ZJU), Hangzhou, China

B.Eng. in Computer Science (with Honors), GPA: 3.87/4.0, Ranking: Top5% of 181

Advisor: Yingcai Wu

Academic Publications

Conference Papers

- [C.5] Zhuohao Zhang, Zhilin Zhang, Haolin Yuan, Natã Barbosa, Sauvik Das, Yang Wang. 2020. [On Using a Friendsourcing Tool to Help People with Visual Impairments Solve CAPTCHAs] In Submission of CSCW 2020
- [C.4] Zhuohao Zhang, Sana Malik, Leo Zhicheng Liu, Tak Yeon Lee, Fan Du, Ryan Rossi, Eunyee Koh. 2020. [On Authoring Interactive Data Story for Business Analysts]. In Submission of CHI 2021
- [C.3] Natã Barbosa, Zhuohao Zhang, Yang Wang. 2020. Do Privacy and Security Matter to Everyone? Quantifying and Clustering User-Centric Considerations About Smart Home Device Adoption. In Proceedings of SOUPS 2020

- [C.2] **Zhuohao Zhang***, Xiyuan He*1. 2019. GPK: An Efficient Special Symbol Input Method for Keyboards Using Glide. In Proceedings of CHI 2019 EA
- [C.1] Lei Shi, Holly Lawson, Zhuohao Zhang, Shiri Azenkot. 2019. Designing interactive 3D printed models with Teachers of the Visually Impaired. In Proceedings of CHI 2019

Demos

[D.1] Lei Shi, **Zhuohao Zhang**, Shiri Azenkot. 2019. A Demo of Talkit++: Interacting with 3D Printed Models Using iOS Devices. In Proceedings of ASSETS 2018

WORKING PAPERS

- [W.5] **Zhuohao Zhang**. Making Challenging Online Tasks Accessible for People with Visual Impairments. University of Illinois at Urbana-Champaign (Thesis'21)
- [W.4] **Zhuohao Zhang**, Haolin Yuan, Natã Barbosa, Sauvik Das, Yang Wang. A Human-AI Hybrid Tool for Social Media Image Privacy and Security Screening for Visually Impaired People
- [W.3] Cheuk Yin Phipson Lee, **Zhuohao Zhang**, Jaylin Herskovitz, Anhong Guo. Making Online Collaborative Editing Accessible for People with Visual Impairments
- [W.2] **Zhuohao Zhang**, Alex Mariakakis. Understanding User Preference in AI Interpretability Models for Skin Cancer Detection
- [W.1] Natã Barbosa, **Zhuohao Zhang**, Sauvik Das, Yang Wang. GuardLens: Give Visually Impaired People Easy Access to Security and Privacy-related Information Online

Research Experiences

MAIN EXPERIENCES

2020.10-now University of Michigan at Ann Arbor, Remote

Graduate Research Assistant

Human-AI Lab, Supervisor: Anhong Guo

- Research on making collaborative editing more accessible for people with visual impairments
- Utilizing augmented reality and spatial audio to enhance their perception and accessibility [W.3]

¹Contributed Equally as First Authors

2019.10-now University of Illinois at Urbana-Champaign, Urbana, IL

Graduate Research Assistant

Social Computing Systems Lab, Supervisor: Yang Wang

- Research on using friendsourcing method to help people with visual impairments solve inaccessible web tasks and maintain their privacy and security at the same time. Collaborating with Prof. Sauvik Das, Gatech
- Submitted a full paper to CSCW 2021 [C.5] and other related publications [C.3, W.1, W.4, W.5]

2017.10-2018.12 Cornell University (Cornell Tech), New York, NY

Research Assistant

Enhancing Abilities Lab, Supervisor: Shiri Azenkot

- Designed an iOS application "Talkit++" to augment fabricated 3D models for blind people; Deployed in real use at several special education schools; Project released at: https://www.interactiveprintedmodels.com
- Results have been published at ASSETS 2018 [D.1] and CHI 2019 [C.1]

OTHER COLLABORATIONS

2020.07-2020-10 University of Washington, Seattle, Remote

Research Assistant, Access Computing Summer Program [W.2]

Supervisor: Alex Mariakakis

2018.07-2018.09 University of California, Davis (UCD), Davis, CA

Summer Visiting Intern, Viz & Interface Design & Innovation (VIDI) Lab

Supervisor: Kwan-Liu Ma

2018.12 Hong Kong University, Remote

Joint Collaborator with Other Undergraduates [C.2]

Principal Investigator: Francis Chi Moon Lau

2017-2019 Zhejiang University, Hangzhou, China

Undergraduate Research Assistant, Interactive Data Group

Supervisor: Yingcai Wu

Working and Teaching Experiences

2020.05-08 Adobe Research

Summer Research Intern, VaaS group, with Dr. Sana Malik and Prof. Zhicheng Liu

- Design an authoring tool to support data-driven report creation for business analysts with no technical background
- Submitted to CHI 2021 [C.4]

2019-2020 University of Illinois at Urbana-Champaign, Urbana, IL Teaching Assistant for course CS107, CS125, and CS498

Honors and Awards

- 2019 ACM CHI Student Research Competition, Second Prize
- 2019 Chu Kochen Honors College Research Scholarship (top 5%) *Awarded \$15000 in support for conducting research abroad*
- 2016-2018 First-class Scholarship for 3 successive years (top 3% in 850 students)
 - 2016 Zhejiang Provincial Scholarship Awarded for Excellent Students

Presentations and Talks

- 2020.08 Adobe Research HCI Seminar, Virtual
 - Title: Codas: Data Story Authoring Tool for Business Analysts
- 2019.05 CHI 2019, Glasgow, UK
 - Title: An Efficient Special Symbol Input Method for Keyboards Using Glide
- 2018.10 Tactile Graphics in Education and Career Symposium, Baltimore, MD Title: Sensables: 3D Printed Models for Visually Impaired Students (with Ph.D. Lei Shi)

Academic Services

Assigned Reviewing

CHI 2021, CHI 2019 Late Breaking Work, CHI 2019

Skills

Technologies

Web development (JavaScript, SQL, React, D3.js, etc.), mobile developing (iOS & Android, React Native), XR Toolkits (HoloLens, Oculus Rift, ARKit), ... Machine Learning Models and Implementation, Information Retrieval, Computer Vision, Optimization, ...

Language

English (Proficient), Chinese (Native)