Xingyu "Bruce" Liu

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Education

2020 - now

Ph.D. Student, University of California, Los Angeles

Electrical and Computer Engineering, UCLA HCI Lab Advised by Xiang "Anthony" Chen

MS Thesis: Human-AI Systems for Video Accessibility

2016 - 2020

■ B.S. in Statistics and Machine Learning, Carnegie Mellon University

Additional Major in Human-Computer Interaction Minor in Computer Science with University Honors

Publications

Peer-reviewed Publications

- [1] Xingyu "Bruce" Liu, Ruolin Wang, Dingzeyu Li, Xiang 'Anthony' Chen, and Amy Pavel. 2022. CrossA119: Identifying Video Accessibility Issues via Cross-Modal Grounding. In *Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology* (UIST '22) Article 43. Association for Computing Machinery, Bend, OR, USA, 14 pages. ISBN: 9781450393201. ODI: 10.1145/3526113.3545703. Best Paper Award.
- [2] **Xingyu Liu**, Patrick Carrington, Xiang 'Anthony' Chen, and Amy Pavel. 2021. What Makes Videos Accessible to Blind and Visually Impaired People? In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (CHI '21) Article 272. Association for Computing Machinery, Yokohama, Japan, 14 pages. ISBN: 9781450380966. ODI: 10.1145/3411764.3445233.
- [3] Cole Gleason, Amy Pavel, **Xingyu Liu**, Patrick Carrington, Lydia B. Chilton, and Jeffrey P. Bigham. 2019. Making Memes Accessible. In *The 21st International ACM SIGACCESS Conference on Computers and Accessibility* (ASSETS '19). Association for Computing Machinery, Pittsburgh, PA, USA, 367–376. ODI: 10.1145/3308561.3353792.

Under Review

- [4] **Xingyu Liu**, Ruolin Wang, Xiang 'Anthony' Chen, and Amy Pavel. 2022. Understanding How Blind and Visually Impaired People Leverage Accessibility Metrics In Practice. *Under Review*.
- [5] **Xingyu Liu***, Joanne Leong*, Hanseul Jun, Sven Kratz, Yu Jiang Tham, Andrés Monroy-Hernández, Brian A. Smith, and Rajan Vaish. 2022. Wormholes: Augmenting Everyday Object as Connection Endpoints for Remote Awareness. *Under Review*.

Patents

- [6] Bing Liu and **Xingyu Liu**. 2020. Method, device and computer product for predicting disk failure. Patent No. US20200233587A1, CN111459692A. (July 2020).
- [7] Bing Liu and **Xingyu Liu**. 2020. Method, device, and computer program product for facilitating prediction of disk failure. Patent No. US20200133758A1, CN111104293A. (April 2020).

Awards and Honors

Best Paper Award, UIST 2022

■ Distinguished Master's Thesis Research Award, UCLA ECE Department.

2020-2022 **Departmental Fellowship**, UCLA ECE Department, \$65,000.

2018 **Best Social Impact Award**, TartanHacks (40+ teams).

First Place, Most Technical Award, HackNY (20+ teams).

2016 Mizuho Scholar, Mizuho & Wing Hang Bank Scholarship and Charity Funds, \$1,000.

2016 – 2020 **Dean's List**, Carnegie Mellon University.

Professional Experience

2022 spring/summer

Google Labs, Student Researcher.

Augmented language.

Advised by Dr. Ruofei Du.

2021 summer

Snap Research, Research Intern.

AR-based physical connections for remote awareness between friends.

Paper in submission.

Advised by Dr. Rajan Vaish and Dr. Brian A. Smith.

2019 - 2020

CMU Accessibility Lab, Research Assistant.

Making social media content accessible.

Two papers published at ASSETS and CHI.

Advised by Prof. Amy Pavel, Prof. Jeffrey Bigham, and Prof. Patrick Carrington.

2018 - 2019

CMU CHIMPS Lab, Research Assistant.

Summarizing terms and conditions with crowdsourcing and ML.

Advised by Prof. Jason Hong.

2018 summer

Dell EMC, Machine Learning Intern.

ML-based disk failure prediction with SMART and BMS log data.

Two US patents published.

Service

2020 – present

Reviewer

CHI 2021-2023, UIST 2020-2022, CSCW 2020-2021

2015 - 2016

■ Volunteer at Braille Without Borders (BWB)

Volunteered as a teacher in School for the Blind at BWB (preparatory school) for two summers.