Andi Xu

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https://andorexad.github.io/

Education

09/2020 – 12/2023
Ann Arbor, MI

University of Michigan
Bachelor of Science in Computer Science
Minor in Mathematics
Minor in Japanese
GPA: 3.9 / 4.0

Publications

2023 **Andi Xu**, Mahdi Qazwini, Chen Liang, Anhong Guo. Deploying VizLens: Characterizing User Needs, Preferences, and Challenges of Physical Interfaces Usage in the Wild. In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility* **(ASSETS 2023 Demo)**. New York, United States.

2022 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.

Research Experience

01/2022 – Present
Ann Arbor, MI

Human-AI Lab, University of Michigan
Undergraduate Researcher
Advised by Professor Anhong Guo

- Conducted deployment studies to examine real-life consumption of image descriptions by blind and visually impaired users with iOS app ImageExplorer.
- Developed a mobile system to enable blind and visually impaired individuals to create custom programs for accessing visual information. Built a pipeline of AI models, a block-based programming interface, and a multi-modal program-creation module.

09/2021 - 04/2022
Ann Arbor, MI

Systems Imaging & Bioinformatics Lab, University of Michigan
Research Assistant
Advised by Professor Arvind Rao

- Built deep learning architecture for tumor segmentation, using a non-local U-net architecture with flexible global aggregation blocks. The project aimed to predict key mutation outcomes and biological pathway activities in bladder cancer.

Work Experience

12/2020 –04/2021 Beijing, China

ByteDance
Product Operation Intern
- Led 30+ freelancers on data labeling to improve the product's AI model performance.

Projects

Winter 2023

One Ring to Rule Them All: A Ring for VR Keyboard Input
- Designed a VR input device with a Voice Pickup Bone Sensor microphone. Leveraged finger tracking and Surface Acoustic Waves from the microphone for precise detection of finger-to-surface contact to enhance VR typing interaction.

Winter 2022

Stock Price Prediction Using Twitter Sentiment Analysis
- Developed a stock price prediction system using sentiment analysis of Twitter data and historical market trends with Gaussian Mixture Models, VADER, and time series analysis.

Winter 2022

Unimodal Methods for DeepFake Audio and Video Classification with Spectral Features
- Designed a unimodal spectral-based DeepFake Video Classifier by using discrete Fourier transform and azimuth averaging to image frames and spectral centroid analysis to audio for 1D spectral feature extraction.

Awards

Winter 2020 – Present

University Honors
UM Students who earned a 3.5 grade point during a term.

03/2022 - Present

James B. Angell Scholar
UM Students who achieve an "A" record for two or more consecutive terms.

Teaching

09/2022-04/2023

Instructional Aide, UM EECS 493 User Interface
- Lead weekly discussions; held weekly office hours to answer student questions.
- Helped to redesign course content; conducted four 1-1 interviews and led to create an interview dataset for the final project.