BO LIU

Portfolio: boliu97.github.io
boliu97@outlook.com

EDUCATION

University Of Washington 2021 – March 2023 (expected)
Master's in Technology Innovation Seattle, WA

Clark University 2016 – 2020
Bachelor's in Arts, Computer Science (Dean's List, 2020) Worcester, MA
Minor, Entrepreneurship

RESEARCH EXPERIENCE

Research Assistant, Ubiquitous Computing Lab July 2020 - Present
Advisor: Shwetak Patel *Seattle, WA*

- Researching and fabricated clothing with embroidered fabric speakers for body movement tracking.
- Researched Intestinal Bowel Disease users' social considerations and preferences on using health apps (self-monitoring apps) with qualitative interview study. [**P2**]
- Designed and implemented a novel method to read glucose strips using a mobile phone sensor. These new sensors are more convenient and affordable than existing patient adherence methods.
- Co-organized and participated in lab events and routines: group meetings, lab lunches, summer high school programs, and mentorship programs.

Research Assistant, Make4All Lab September 2022 - Present
Advisor: Jennifer Mankoff *Seattle, WA*

- Researching the haptic exploration of embroidered tactile graphics, abstracting physical information for optimization.

Research Assistant, Pervasive HCI Group, Tsinghua University April 2021 - August 2021
Advisor: Chun Yu *Beijing, CHINA*

- Designed and implemented a novel tool that allows people without video editing skills to conveniently create video tutorials for elderly-friendly smartphone usage.[**P1**]
- Served as project manager intern, conducting user research and profiling the target market to turn a research project into a commercial product.

Research Assistant, Clark Computing Lab September 2019 - May 2020
Advisor: Niu Shuo *Worcester, MA*

- Created three AI-powered applications to track users' mental states and promote better connections between patients and doctors.
- Researched current-stage mental health issues and mobile applications used for mental disorder logs.

PUBLICATION

Submitted for Publication

[**P1**] **Bo Liu**, Jason Hoffman, Chloe Sow, Yuqing Zhang, Shwetak Patel. "Too simple or way too complicated": Patients' Preferences for E-Health Apps for IBD Management. Manuscript submitted for publication to CHI.

[**P2**] Xiaozhu Hu, Yanwen Huang, **Bo Liu**, Ruolan Wu, Yongquan Hu, Aaron J Quigley, Mingming Fan, Chun Yu, Yuanchun Shi. SmartRecorder: An IMU-based Video Tutorial Creation by Demonstration System for Smartphone Interaction Tasks. Manuscript going through revision and resubmitted to IUI.

TALKS

[T1] SoundShirt: Continuous body tracking using embroidered speakers on clothing, Nov 2022
University of Washington Annual Research Showcase, Seattle, WA

[T2] Deep Learning in Art styles Recognition, Oct, 2019
Clark Fall Fest, Worcester, MA

PROFESSIONAL EXPERIENCE

IT Specialist, Global Innovation Exchange January 2022 - Dec 2022

- Providing technical support to startups, faculty, and students ensuring proper workstation, printer, and VR/AR materials maintenance.
- Maintaining inventory management/surplus control.
- Implemented and maintained security camera systems.

Software Engineering Intern, Synopsys August 2020 - May 2021

- Developed software to solve Incremental Boolean Satisfiability (SAT) problem, which reduces chip verification time. Implementing this by including functions missing in the existing industry-leading software.
- Designed and developed dashboards that convert JSON data into easy-to-understand information, allowing customers to get information without having to understand JSON files and conduct analysis.

ADDITIONAL PROJECT

Software Engineer & UX Researcher, Artify June 2022 - December 2022
Sponsored by T-Mobile

- A graduate project designed a future AR museum visit using 5G and cloud computing.
- Investigated current AR applications' limitations and general public interactive museum visiting experience with quantitative methods.
- Designed and developed frontend interfaces and backend servers to connect Hololens(AR devices) with three rounds of usability testing.

MENTORSHIP

1. Chloe Sow (Senior high school student)
Researched and designed semi-structure interview questions and prototype[P1]

AWARD

1. University of Washington Graduate Student Conference Presentation Awards 2022
2. ClarkCONNECT Award 2020
3. Selected as a funded student to attend **Giersch International Symposion, Germany, 2019**

SKILLS

Programming Skills:
C, Python. Kotlin, Java

Fabrication:
Arduino, Circuit Design, Embroidery Design, 3D printing, Laser Cutting.

User Research:
IRB Writing, Interface Design, Interview Design, Qualitative Data Analysis.