Mikayla Buford

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Research Interests

Human-computer interaction, interactive art, creative technology, Afrofuturism

Education

09/2016 - 05/2020 Madison, WI

University of Wisconsin-Madison

Madison, WI BS in Computer Science

Research Experience

05/2020 - 08/2020Remote

Microsoft Research - Redmond, Urban Innovation, Undergraduate Research Intern

COVID Couture: Exploring the Intersection of Fashion and PPE

Mentor: Asta Roseway

• Conducted a design study of designers and makers developing personal protective equipment to document how their work affects our perception and use of masks, as well as the design of future health wearables.

09/2019 – Current Madison, WI

University of Wisconsin-Madison, Human-Computer Interaction Lab, Undergraduate Researcher

Platform Development for Social Capabilities for the Kuri Robot

Principle Investigator: Dr. Bilge Mutlu

• Tested platform development on Kuri robot using ROS for continued use developing a socially conscious robot through observational learning.

06/2019 – 08/2019 Cambridge, MA

MIT Media Lab, Object-Based Media Group, Undergraduate Research Intern

(Don't) Touch My Hair: Exploring Consent Education through Interactive Art Principle Investigator: Dr. V. Michael Bove

• Designed an interactive sculpture of a black woman with an Afro that taught users how to respectfully explore their curiosities about black hair and learn the sensitivity of black women concerning their hair.

09/2016-05/2016 Madison, WI

University of Wisconsin-Madison, Library Science and Information Studies, Undergraduate Research Scholar

Analysis of Patient-Targeted Medical Mobile Apps Principle Investigator: Dr. Catherine Arnott Smith

• Assisted in data collection of 100 patient-targeted medical applications from the Apple App Store to analyze the similarity in medical language used in the apps compared to medical journals.

Professional Experience

Madison, WI

05/2018-5/2020 Office of Vice Chancellor for Graduate Research and Education-Information Technology, Student Web Developer

Developed and maintained web applications used by faculty staff for admissions using C# and SQL.

Honors & Awards

09/2016 - Current

Mercile J. Lee Chancellor's Scholar

Full Tuition Academic Merit-Based Scholarship

05/2019 - Current

Ronald E. McNair Post-Baccalaureate Achievement Program (McNair Scholars Program)

The McNair Scholars Program is a federally funded program designed to prepare undergraduate participants for doctoral studies and graduate education through involvement in research and other scholarly activities.

Massachusetts Institute of Technology Summer Research Program (MSRP) Alumnus

1 of 40 students chosen out of a pool of +450 applicants to conduct research on with top researchers at MIT and present our research on campus.

2018 Anita B.org Grace Hopper Celebration

Fully Funded Scholarship for Grace Hopper Celebration

Additional Projects

Summer 2018 - Current Pink Tax App

Developed a Java program that calculates the "pink tax", or extra fee that women pay for some products in comparison to the men's equivalent product and tax on feminine hygiene products, that a user chose in a virtual store.

Spring 2018

Thought Jar

BuildHer Hackathon

- Developed and designed a mobile application using React Native that poses thought provoking questions for users who want to practice critical thinking and intentional interaction with technology.
- Worked in a 4-women team of programmers and won Best Beginner Hack at the hackathon

Spring 2018

Edible Landscapes App

Coding for Good Student Organization

Five other students and I partnered with an environmental student organization on campus to create an Android application to easily locate urban garden's on campus.

Presentations

04/2020 (Cancelled due to COVID-19)

Undergraduate Research Symposium

Platform Development for Social Capabilities for the Kuri Robot

Madison, WI

MIT Media Lab MIT Summer Research Program Intern Presentation

08/2019 Cambridge, MA

(Don't) Touch My Hair: Exploring Consent Education Through Interactive Art

06/2016 Undergraduate Research Symposium

Madison, WI Terminology in Patient-facing Medical Mobile Applications

Service

2017,2018 Madison, WI

Expanding Your Horizons, Computer Science Workshop Volunteer

• Facilitated hands-on and online computer science immersion activities for middle school girls.

Teaching

07/2020 - Current

MAKE'ayla - MakeCode Livestream Show

• Host a livestream on the Microsoft MakeCode channel on Twitch and teach viewers how to program microcontrollers and other electronics using the MakeCode Web IDE.

 $\begin{array}{c} 2018,\,2019 \\ UW\text{-}Madison \end{array}$

Instructor – Basic Linux Workshop

• Taught over 150 undergraduate students basic Linux commands for navigation, file manipulation, text editing, and compilation of Java and C programs.