

# Mikayla Buford

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[mikaylab.github.io](https://mikaylab.github.io)

## Research Interests

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

## Education

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| 08/2020 – 05/2022<br>Ann Arbor, MI | <b>University of Michigan – Ann Arbor, STAMPS School of Art and Design</b><br>MDes in Integrative Design |
| 09/2016 – 05/2020<br>Madison, WI   | <b>University of Wisconsin – Madison</b><br>BS in Computer Science                                       |

## Research Experience

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| 09/2020 – Current<br>Ann Arbor, MI | <b>University of Michigan, College of Pharmacy, UI/UX Designer</b><br><i>MCubed Project: Development of an EHR clinical decision support application to improve the safety and quality of heart failure care</i><br>Investigators: Dr. Mike Dorsch, Dr. Kelly Murdoch-Kitt <ul style="list-style-type: none"><li>Designed various prototypes for an electronic health record (EHR) application to facilitate management of heart failure care. Conducted usability tests with healthcare providers to improve and inform the prototype design.</li></ul> |
| 09/2020 – 12/2020<br>Ann Arbor, MI | <b>University of Michigan, STAMPS School of Art and Design, Graduate Student Research Assistant</b><br><i>ORBIT: Web Tool for Collaborative Remote Intercultural Teams</i><br>Principle Investigator: Dr. Kelly Murdoch-Kitt <ul style="list-style-type: none"><li>Analyzed survey data from a local middle school to produce design considerations for a future ORBIT version for middle school students.</li></ul>   |
| 05/2020 – 08/2020<br>Remote        | <b>Microsoft Research - Redmond, Urban Innovation, Undergraduate Research Intern</b><br><i>Crisis Couture: An Empirical Study on Motivations and Practices of Mask Makers During a Crisis</i><br>Mentor: Asta Roseway <ul style="list-style-type: none"><li>Conducted a mixed methods study of mask makers during the COVID-19 pandemic on their attitudes and reflections on their mask making processes, their unique innovations, and the meaning of contributing in an impactful manner in local and global communities.</li></ul>                   |

- 09/2019 – 05/2020 **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 **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 **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

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- 05/2018 – 05/2020 **Office of Vice Chancellor for Graduate Research and Education-Information Technology, Student Web Developer**  
*Madison, WI*
- Developed and maintained web applications used by faculty staff for admissions using C# and SQL.

## Honors & Awards

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- 09/2016 – 05/2020 **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.
- 2019 **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

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*Summer 2018* **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.

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## **Presentations**

*04/2020 (Cancelled due to COVID-19)*  
*Madison, WI*

**Undergraduate Research Symposium**

*Platform Development for Social Capabilities for the Kuri Robot*

*08/2019*  
*Cambridge, MA*

**MIT Media Lab MIT Summer Research Program Intern Presentation**

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

*06/2016*  
*Madison, WI*

**Undergraduate Research Symposium**

*Terminology in Patient-facing Medical Mobile Applications*

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## **Service**

*02/2021* **STAMPS Office of Research DE&I Grant Committee Member**

- Served as a graduate representative on the grant committee to review grant proposals to fund joint faculty, student, and staff research that would further the School’s diversity, equity, and inclusion mission through.

*2017,2018*  
*Madison, WI*

**Expanding Your Horizons, Computer Science Workshop Volunteer**

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

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## **Teaching**

*Summer 2020* **MAKE’ayla - MakeCode Livestream Show**

- Guest livestreamer on the Microsoft MakeCode channel on YouTube to teach viewers how to program microcontrollers and other electronics using the MakeCode Web IDE.

*2018, 2019*  
*Madison, WI*

**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.