**Myranda Uselton**

1266 Chapman’s Retreat Drive, Spring Hill, TN 37174

(615) 417-9464

myranda.uselton@gmail.com

[www.linkedin.com/in/myranda-uselton-b68028175/](http://www.linkedin.com/in/myranda-uselton-b68028175/)

**Summary**

Data scientist with experience in software development, physical science research, and interdisciplinary collaboration

**Employment**

**Graduate Research Assistant**

Vanderbilt University**,** Department of Physics and Astronomy October 2020 – present

* *Responsibilities:* Maintaining Filtergraph, a web-based data visualization tool, and utilizing data science research methods for interdisciplinary research teams

**Mixed Reality Software Developer Intern**

NASA Glenn Research Center**,** Graphics and Visualizations (GVIS) Lab August 2019 – December 2019

* *Responsibilities:* Developing augmented and virtual reality applications for the Graphics and Visualization (GVIS) lab
* *Accomplishments:* Completion of 4 projects for the zSpace and Magic Leap devices, which are now shown on NASA GRC tours of the GVIS lab. Presentation in Washington, D.C., to the House of Representatives. Co-lead several outreach activities outside of work requirements including mentoring high school students in data science, demonstrating apps at local schools and museums, and playing clarinet for the NASA Glenn Band

**Software Developer**

James E. Walker Library**,** Library Technology August 2018 – May 2020

* *Responsibilities:* Developing augmented reality (AR) programs for simulation and education purposes
* *Accomplishments:* Completion of two projects for the Microsoft HoloLens and Magic Leap devices. Promotion to higher pay scale in 2019

**Missions Intern**

CrossRoads Missions, New Orleans FieldMay 2018 – August 2018, July 2020

* *Responsibilities:* Leading volunteer groups for disaster relief in New Orleans, LA. Primary duty to serve as leader in inner-city camp for children and guide volunteers on construction worksites

**Education**

**Vanderbilt University – Nashville, TN**  August 2020 – present

* *Degree:* M.S. in Data Science
* *Accomplishments:*
  + Graduate Fellow (2020) – full tuition scholarship for the Data Science M.S. program
  + Neurodiversity Inspired Science and Engineering (NISE) Fellow (2020-2021) – a NSF-sponsored traineeship that encourages interdisciplinary research supporting neurodiversity

**Middle Tennessee State University (MTSU) – Murfreesboro, TN**  August 2016 – May 2020

* *Degree:* B.S. in Chemistry, minors in Computer Science,Mathematics
* *Accomplishments:*
  + President’s Award (2019) – highest university honor given once a year to one student at MTSU who exhibits exceptional leadership skills, academic accomplishments, and community impact
  + Honors College – completion of 25 hours of Honors coursework as well as independent research thesis
  + Awards – Dr. James H. and Betty S. Hutchinson Scholarship for professional chemistry (2018-2020), Hypercube Award for computational chemistry, Paul W. Martin, Sr., Scholarship (2018-2020) for Honors College leadership

**Projects and Research**

**NASA – zSpace Development**  August 2019 – December 2019

* *Project Titles:* “NASA Concept Vehicles,” “Mars Lab”
* *Description:* XR programs developed using Unity and Visual Studio for the zSpace. Apps allow users to investigate and dissect future NASA vehicles or analyze the surface of Mars using rover instruments

**NASA – Magic Leap Development**  August 2019 – December 2019

* *Project Title: “*James Webb Space Telescope”
* *Description:* AR app developed in Unity and Visual Studio for the Magic Leap that allows users to explore and learn about the James Webb Space Telescope and its mission

**Independent Web Development**  August 2019 – December 2019

* *Project Title: “*Myranda Goes to Space: A website dedicated to my fall internship at NASA”
* *Project URL:* https://MyrandaGoesToSpace.github.io
* *Description:* A personal website coded in HTML, CSS, and JavaScript

**Honors Undergraduate Thesis**  November 2018 – March 2020

* *Faculty Mentor:* Dr. Amy Phelps
* *Project Title: “*MoleculAR Visualization: Demonstrating Molecular Geometry through Augmented Reality”
* *Description:* Development of an augmented reality program on the Magic Leap One for use in general and organic chemistry labs. Thesis defended in Spring 2020.

**Undergraduate Research – Analytical and Biochemistry**  September 2018 – December 2018

* *Faculty Mentor:* Dr. Beng Guat Ooi
* *Description:*Using spectroscopic techniques to determine the chemicals present in color run powders and assess their impact on human health

**Undergraduate Research – Computational Chemistry**  April 2017 – May 2018

* *Faculty Mentor:* Dr. Jing Kong
* *Description:* Refining of density functional methods for use in computational sciences
* *Awards:*Undergraduate Research and Creative Activity (URECA) Silver Scholar Grant (2018), URECA Assistant Grant (2017)

**Selected Presentations and Publications**

Uselton, M. (2019, June). Investigating quantum computation. *Scientia et Humanitas 2019*.

Uselton, M., et al. (2019, February). *Augmented Reality to Improve Student STEM Success.* Poster session presented at annual Tennessee STEM Education Research Conference.

Uselton, M. & Kong, J. (2018). *Analyzing Single-Molecule Magnets with Density Functional Theory.* Poster session presented at Middle Tennessee State University Scholars Week.

**Relevant Extracurricular Activities**

***Scientia et Humanitas*** (Fall 2018 – Spring 2019):editor foracademic research journal sponsored by the MTSU Honors College

**Rutherford County Cat Rescue** (Fall 2018 – Spring 2019, Spring 2020 – present): regular volunteer for local animal shelter

**Expanding Your Horizons (EYH)** (Fall 2017 – Fall 2018): group leader and volunteer for conference encouraging middle and high school girls to pursue STEM careers

**MTSU Chemistry Society** (Fall 2016 – May 2020): treasurer, member, and volunteer for chemistry department events, Discovery Science Center, and Linebaugh Library