

# Brandon McIntyre

Okemos, MI 48864 | (517) 745-0997 | mcint170@msu.edu | <https://mcint170.github.io/Website/>

## Education

### **Bachelor of Science: Data Science | Minor: Cognitive Science**

*Spring 2022*

Michigan State University | College of Natural Science | East Lansing, MI

- GPA: 3.90; Dean's List (all eligible semesters); Charles Drew Science Scholar

### **Associate of Science**

*August 2015 – May 2018*

Jackson College | Jackson, MI

- GPA: 3.88; Dean's List (all eligible semesters)

## Experience

### **Learning Assistant, CMSE 202**

*January 2020 - Present*

MSU Computational, Mathematics, Science, and Engineering (CMSE) Department | East Lansing, MI

- Monitored 40+ students during class to answer any students' questions and promote positive learning environment.
- Met with 40+ students outside of class in weekly office hours to assist in course work and techniques used in class.
- Created assignments for 200+ students that introduced the Command Line Interface and use of GitHub tools.
- Analyzed student surveys and experience to modify course work to increase student comprehension of topics.

### **Summer Undergraduate Researcher**

*May 2019 – August 2019*

MSU Physics and Astronomy Department | East Lansing, MI

- Simulated Type IIP Supernovae to visualize the effect starting conditions have on the light-curve of the Supernovae.
- Utilized MSU's Computer Cluster through the command line interface to edit, compile, and run programs remotely.
- Presented research poster at MSU's Mid-SURE informing students and faculty of all disciplines about my research.

### **Electrical Engineering Intern**

*June 2017 – January 2019*

Orion Engineering | Jackson, MI

- Assisted with plant wide studies of power distribution, arc flash mitigation, and short circuit studies to improve safety and cost-effectiveness of businesses and factories.
- Participated in 10+ fieldwork days to collect measurements on devices and structures, as well as attend meetings with clients to go over proposed plans and collect feedback.
- Utilized Excel and ETAP for testing safety/efficiency of power networks to determine suggestions for client proposals.

## Technical Skills, Courses, and Projects

### **Programming Languages and Tools**

- Python, R, C++, Bash, Anaconda, GitHub, SQL, Excel, ETAP

### **Packages**

- Numpy, Matplotlib, Pandas, Scikit Learn, Networkx, PyTorch, OpenMp, Cuda, Seaborn, Statsmodels, Plotly, PIL, SQLite

### **Concepts**

- Data Visualization, Data Modeling, Data Processing, Data Structures, Statistical Analysis, Parallel Processing, Fundamental Machine Learning Models, Basic Artificial Intelligence Models, Time Complexity Analysis

### **Courses**

- Prob. & Stat. for Data Sci., Fundamental Data Sci. Meth., Meth. Parallel Computing, Intro to Machine Learning, Comp. Medicine, Algorithms and Data Structures, Data Visual Principle Techniques, Comp. Models Tools and Techniques.

### **Projects**

- Parallelizing Pytorch using multiple GPUs on MSU HPC, Visually Analyzing City Traffic Stop Data, Linking Genotypes to Phenotypes for Drug Prediction, Survey Analysis Interface in Python,

## Activities

### **Design for America, Director of Board | MSU | East Lansing, MI**

*August 2018-Present*

- Designed Solutions for community problems through Human-Centered Design Process to ensure needs were met.

### **Michigan State Observatory Research Program, Expert Observer | MSU | East Lansing, MI**

*July 2019 – December 2019*

- Operated, and taught other students' operation of, Telescope to collect data for Astronomy Department Researchers.

### **Heritage Center, Student Volunteer | Jackson College | Jackson, MI**

*October 2016 – August 2018*

- Helped created film "Answering the Call" that won awards from Governor's Office and Michigan Historical Society.
- Volunteered over 250+ Hours working with community members and other students.