Brandon McIntyre

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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 meet.

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.