Maddux Berry **(661)-645-5944**

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Github - https://github.com/MaceTheWindu66
Portfolio Website- https://macethewindu66.github.io/website

Education

Currently attending Worcester Polytechnic Institute in pursuit of a Computer Science Degree (BS)
High School Diploma (Hart High School)
Advanced Placement Courses, multiple of which are in the field of Computer Science
(Awards): Hart High School Principal's List / Honor Roll (2018-2022), WPI Dean's List Fall 2023

Skills

- Advanced in **Java, C, C++,** and **x86 Assembly Language**, Proficient in **Python and Java Script**
- Experienced with mathematical concepts, specifically discrete mathematics and logical operations
- Extensively worked with and understand Operating Systems, specifically **Linux**
- Advanced skills in systems programming concepts
- Well versed with **Artificial Intelligence** concepts
- Web Development
- Proficient understanding of **Algorithms**
- **Parallel Programming**
- Experience in working with threads and creating **synchronous thread-safe programs**
- Teamwork, Communication, and Time Management
- Realistic program design and iterations experience

Experience / Projects

- **Project Manager / Full Stack Developer - Mass General Hospital Kiosk**
  - At WPI, I worked on a team of 11 of my peers as the Project Manager as well as a Full-Stack developer in an environment that simulated a real workplace. My team was tasked with developing a hospital kiosk app, which included service requests that worked in conjunction with a back-end database, pathfinding components, among other useful features.
- **N-Queens Problem Solving Program**
  - Utilized a backtracking algorithm to solve the famous N Queens Problem based on an input for how many queens (N) you wished the program to solve for.
- **Bomb-Lab and Attack-Lab**
  - At WPI, I was given the opportunity to tackle the infamous Bomblab assignment found in many collegiate courses, as well as Attack-Lab. For these assignments, I was tasked with finding vulnerabilities, as well as solving complex puzzles and issues, in **x86 Assembly** code, and using my findings to achieve a desired goal.
- **Deep-Learning Snake Model**
  - For this personal project, I introduced myself into the field of Machine Learning, using tutorials and YouTube videos to help me create my first Neural Network and Deep Learning model. This model in particular teaches itself how to play the famous game of Snake, using Deep-Q Learning to enhance its abilities through every iteration of itself.
- **Personal Portfolio Website**
  - Using my Full-Stack developer experience, I utilized React, TypeScript, CSS, and HTMLto create a website to show off my history of projects and experience related to Computer Science, as well as showing off my other hobbies and passions.
- **Systems Programming Experience**
  - Have experience with systems programming in **Linux and Windows Operating Systems**, a majority being in Linux environments
  - Made multiple programs able to read file inputs and produce an output directly to the computer's console using C and C++.
  - Created task-scheduler simulators and **synchronized thread-safe programs** with C in Linux