Michael S. Elrod

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SUMMARY

A passionate and experienced programmer with a strong background in object-oriented programming. Skilled in developing user-focused applications and collaborating on team projects with dynamic user interfaces. Comfortable working within Agile environments, optimizing code performance, and organizing group projects. Currently pursuing both a bachelor's and master's degree in computer science. Focused on delving further into topics related to Artificial Intelligence, Machine Learning, Cloud Computing and Web/Mobile Application development.

EDUCATION

Clemson University – *Bachelor's in Computer Science*   **August 2021 – May 2024**
- GPA 3.5

SKILLS

Languages
- Python, Java, C/C++, HTML/CSS, JavaScript

Tools
- AWS, REST API, Git, Selenium, Flutter, Jira

PROJECTS

- Recently began participating in professor lead research to create a program that uses drone imagery to locate and pollinate plants with optimal pathfinding algorithms with multiple constraints
- Researching and practicing machine learning topics such as supervised, unsupervised, and reinforcement learning, as well as model evaluation, using Python and data visualization libraries
- Collaborated with a team to develop a RESTful API that imitated the review section of a food delivery application using JavaScript and hosted on AWS
- Deployed, managed, and monitored cloud-based infrastructure on AWS utilizing non-relational databases, Lambda functions, and the AWS CLI
- Created a personal website to showcase my portfolio using JavaScript, HTML/CSS, and Firebase to automate updates to the site via GitHub, linked above
- Designed and implemented two custom 2D game engines using C++/Lua and Python

EXPERIENCE

NIWC / BRIEF - *Software Developer - Capstone*   **January 2023 – Current**
- Collaborating with BRIEF for my capstone project and a team of peers from my university capstone course on a real-world, STEM-focused educational app for students
- Engineering the backend API for the application's functionality utilizing React and JavaScript
- Developed user interface prototypes for the mobile version using Figma and Flutter

Blue Cross Blue Shield - *Software Developer - Intern*   **May 2023 – August 2023**
- Worked on the Contact Center Technology team creating and maintaining new features for their clients' contact centers using Java and other proprietary software
- Developed a Python script to identify and delete unused objects from the company's database, resulting in enhanced system performance through reduced memory usage
- Completed multiple one-week sprints, collaborated across departments to solve issues, and met with clients in-person to discuss product future