

JAIK ‘JJ’ McCAULEY

Full-Stack Software Engineer | Honors CS & Data Science Student

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Education

Salisbury University

Salisbury, MD

Bachelors of Science in Computer Science and Data Science, Minor in Mathematics, 3.81 GPA Aug. 2022 - May 2026

- **Academic Interests/Focus:** Full-Stack Software Engineering, Artificial Intelligence, and general computer science
- **Awards/Honors/Leadership:** Upsilon Pi Epsilon President, Pi Mu Epsilon Inductee, Chi Alpha Sigma Inductee, Computer Science, Math, & Data Science Club President, CSC Academic All-District Team

Experience

Booz Allen

Annapolis Junction, MD

Summer Games Intern - Full-Stack Software Engineer

Jun. 2025 - Aug. 2025

- Collaborated with two teammates to deliver a first-to-market, real-time cyber-physical analytics dashboard for a federal client, ingesting, processing, and visualizing live network activity from multiple ZeroTier-connected systems via an Elastic Stack pipeline; filtered over 99.9% of irrelevant incoming traffic to enhance non-technical clarity and drastically reduce analyst review time
- Built a responsive React interface with D3-driven visualizations, simplifying data traffic with intuitive animations
- Implemented a data delivery layer by streaming real-time events via WebSockets and deployed optimized Express REST APIs backed by Redis, enabling rapid configuration and millisecond-level retrieval of live and historical data
- Prepared the application for production deployment by implementing Nginx reverse proxy for secure request handling, systemd service management for persistent uptime, and custom deployment scripts for cross-platform configuration
- Presented the dashboard to a senior military general, receiving enthusiastic approval for performance and usability, securing support for near-term market release

Salisbury University

Salisbury, MD

Computer Science Department Tutor & Lab Assistant

Aug. 2024 - Present

- Provided conceptual and technical guidance to all levels of Salisbury University's Computer Science Department, covering a broad range of topics such as Software Engineering principles, Artificial Intelligence techniques, and Cybersecurity fundamentals, adapting explanations to each student's course level and learning style
- Specialize in assisting advanced third and fourth-year students with low-level Linux systems programming, including Inter-Process Communication (IPC), signal handling, multithreading, and concurrent programming concepts
- Specialize in assisting first and second-year students through foundational CS topics such as control/data structures, modular programming, sorting/search algorithms, and algorithm complexity in Java and C++

Resident Assistant

Aug. 2023 - May 2025

- Mentored 300+ diverse residents, fostering an inclusive community and earning SU's Best Community Builder award
- Led 10+ programs and ensured safety through incident response and coordination with staff and law enforcement

Personal Projects

Testif.AI - github.com/SpencerPresley/UMBC-2024-Hackathon

September 2024

- Won 'Best Educational Hack' at the 2024 UMBC Hackathon with *Testif.AI*, a full-stack web application that leverages advanced AI to automatically generate quizzes and tests from user-provided study materials
- Engineered a responsive frontend using HTML, CSS, and JavaScript to enable intuitive user interaction
- Developed a robust FastAPI-based backend with LangChain, Python, and the OpenAI API, exposing RESTful endpoints to process user inputs and deliver generated assessments dynamically

Android Fitness App - github.com/Jairik/MOVE4WELLNESS-Android-App

May 2024

- Built a fitness app prototype for Salisbury University's 'Move4Wellness' initiative, focusing on student wellness and digital engagement in collaboration with a peer developer
- Designed and implemented the authentication system, GUI, and NoSQL database with Java and Firebase Cloud

Stock Portfolio Management System

May 2025

- Developed a web-based Stock Portfolio Management app for investors to track holdings and manage transactions
- Built core system architecture using PHP and MySQL, integrated real-time financial data from external APIs, implemented role-based access, and visualized analytics via Chart.js and an interactive AJAX frontend

Other Notable Projects: Encrypted Chatroom | AI Puzzle Game | Portfolio Website | Algorithm Performance Benchmark

Technical Skills

Languages: Python, JavaScript/TypeScript, C/C++, Java, SQL, Bash, PHP, R, HTML & CSS

Frameworks: React, Express, FastAPI, Tailwind, Bootstrap, D3.js

Databases: MySQL, Redis, Firebase Cloud Firestore

Tools: Git/GitHub, Linux, Agile/Scrum, Vite, LaTeX, Virtual Machines, WordPress

Cloud/Other: Firebase, OpenAI API, TensorFlow, Elastic Stack (ELK), WebSockets, PyCA Cryptography