ISAAC DUGAN

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Experience

CrunchAtlas — **Sep 2024 – Present**

Chief Software Architect — *Portsmouth, NH*

- Led team of three developers, two security engineers and one UI designer to develop an advanced threat hunting platform with an on-time product delivery for government and commercial customers
- Performed code reviews, determined product architecture, prioritized product requests, met with vendors and created team processes for efficient and high quality engineering
- Developed an advanced threat detection algorithm using state of the art graph theory and parallel computation techniques capable of processing network traffic volume from ISP level taps

Software Engineer

- Fine tuned open source large language model to improve performance on complex analysis tasks and to improve domain vocabulary and specialization
- Drove configuration, and ongoing management of an AWS GovCloud account, ensuring efficient use of cloud resources across multiple projects optimizing cost, security, and performance through resource monitoring, IAM policies, and cost-control measures

Booz Allen Hamilton — **Jun 2024 – Aug 2024**

Software Engineer — *Annapolis Junction, MD*

- Developed a machine-learning audio processing and analysis platform for acoustic keylogging in support of a federal customer
- Implemented API endpoints for file processing, AI clustering, and advanced analytics along with a background job queue for long running machine learning training tasks
- Leveraged automated testing, CI/CD, and containerization to engineer optimized and maintainable code

Open Professional Group — **Jan 2023 – May 2024**

Junior Software Engineer — *Westminster, Maryland*

- Led myself and another developer in refactoring a data validation engine which deduplicated logic and improved parsing of xls, xlsx, zip, pgp and gpg files reducing manual data review by 50%
- Pioneered use of automated testing on project by creating a detailed proposal, writing an initial test suite of 85 tests, educating fellow developers about automated testing practices, and updating team practices to require tests
- Designed and implemented a new subsystem of the application to automate of file transfers complete with error handling, reporting, logging, and configuration management inside the application's UI

GreenerVolts — **Jun 2022 – Aug 2022**

Software Engineering Intern — *Frederick, Maryland*

- Developed an LED upgrade estimation tool that takes project details and automatically generates project estimates, energy savings documents, and places orders for replacement lights in the warehouse management system
- Improved user experience by optimizing a search loading time by 30 seconds and enhancing search functionality in response to user feedback

Education

Salisbury University

Bachelor of Science in Computer Science - Software Engineering Track   *GPA: 3.94*

Database Systems, Software Engineering I/II, Object Oriented Programming, Web Design, Artificial Intelligence

Technical Skills

Go, PHP, Laravel, Python, FastAPI, SQL, Redis, Angular, React, Tailwind, HTMX, Automated Testing, Git, AWS, Docker