ADDO SONGO DAVIES JR.

Bowie, MD • 240-495-0707 • addo.sdavies@gmail.com • linkedin.com/in/addo-davies-jr/ • addodaviesjr.vercel.app

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~ 3 Years of Professional Research & Software Cloud Development Experience ~

Seeking full-time opportunities in Software Cloud Development & Research to use my extensive knowledge of software engineering, cloud engineering, innovative critical thinking skills, & passion for technology to develop & implement high-quality cloud solutions that benefit society.

EDUCATION

Rochester Institute of Technology (RIT), Rochester, NY   May 2024
Bachelor of Science, Software Engineering

CERTIFICATIONS

AWS Certified Cloud Practitioner   Aug 2024
Dale Carnegie Leadership Training   Oct 2023

SKILLS

Programming Languages: Python, Bash, SQL/NoSQL, JavaScript, CSS, HTML, Node.js
Technical Skills: AWS, CloudFormation, Terraform, Ansible, Docker, OpenSCAP, Oracle, PostgreSQL, Git
Key Concepts: Cloud Computing, Object-Oriented Programming, DevSecOps, Database Development, System Testing, Infrastructure as Code (IaC), Agile Methodologies (SCRUM)
Project Oriented Skills: Self-Motivated, Articulate Planner, Team-Player, Critical Thinker, Problem Solver

PROFESSIONAL EXPERIENCE

NumFOCUS   Sep 2024 - Present
Cloud DevOps Engineer
- Developed a website archiving script to automate the archiving of event sites.
- Deployed five AWS Lambda functions to integrate ticket data from multiple ticketing platforms with HubSpot on a bi-weekly schedule and deliver email summaries of each sync with AWS SES.
- Deployed Docker containers on AWS EC2 instances to host and manage web servers.
- Oversee cloud infrastructure and security for open-source projects and provide technical recommendations for their AWS EC2 instances.

National Consortium for the Study of Terrorism and Responses to Terrorism (START) Aug 2024 - Sep 2025
Open-Source Cloud Application Advisor
- Developed a comprehensive Oracle-to-AWS migration plan, including an AWS architecture diagram and monthly cost estimates.
- Migrated Oracle schemas and data to an AWS Aurora PostgreSQL instance using AWS DMS.
- Deployed a proof-of-concept SDEverywhere system dynamics model application using AWS Amplify.
- Deployed a proof-of-concept Requal text annotation application using AWS EC2.
- Deployed proof-of-concept applications for four additional Node-based applications using AWS App Runner.

RIT Collegiate Science & Technology Entry Program (CSTEP), Rochester, NY   Jan 2024 – May 2024
Cloud Application Security Researcher
- Researched ways to create a secure software environment in the cloud for testing proof of concepts, ensuring data integrity & confidentiality while mitigating potential vulnerabilities.
- Conceptualized software requirements needed for 3 distinct solutions.
- Crafted a comprehensive technical research document detailing progress & presenting potential architectures for addressing the identified problem.

RIT Laboratory of Software Design & Productivity, Rochester NY   Mar 2023 – Sep 2023
Software Security Research & Development Engineer
- Enhanced vulnerability management processes with actionable insights from analyzing 800+ CVEs that were in JSON and XML formats.
- Deployed an application to retrieve CVEs from CNA catalogs, gathering 2,800+ unique CVEs.
- Deployed an application to extract CWEs from CVEs, getting 1,000+ unique CWEs between 2020-2023.
- Analyzed collected data & showed patterns for analyzing CVE automatability, characterizing 800+ CVEs.

TEOCO, Henrietta, NY   Aug 2022 – Jan 2023
Software Engineer Intern
- Spearheaded end-to-end product feature development using Python, Selenium, OCR, and Pandas, boosting efficiency by 30%.
- Engineered a password-changing application with Selenium, cutting manual workload by 80%.
- Curated a report analysis application, sending email notifications with detailed statistics, enhancing error resolution & user awareness.

Penn State University Applied Research Laboratory, State College, PA   Jun 2022 – Aug 2022
Software Engineer Research & Development Intern
- Deployed a scalable, fully automated security pipeline for AI software using Docker, Podman, OpenSCAP scanner, & Ansible-Runner. Developed using VS code and in a Linux Environment.
- Orchestrated the development of a streamlined process for pulling, scanning, and reconfiguring Docker images based on OpenSCAP Policy using Ansible, resulting in a 40% reduction in deployment time.
- Enhanced OpenSCAP policy compliance of JupyterLab Image by 23% through pipeline integration.
- Enhanced OpenSCAP policy compliance of RedHat Image by 24% through pipeline integration.

PROJECTS

Maintenance Request Workflow Application – Senior Capstone Project   Sep 2023 – May 2024
Cloud Computing, Microservices, AWS Technologies, Python
- Collaborated with a team of 5 on the development of a responsive web application for Lockheed Martin, streamlining IT license maintenance workflows, serving as Back End Lead.
- Crafted a comprehensive AWS CloudFormation template to implement automatability and infrastructure as code (IaC) to the back-end stack.
- Crafted unit & manual test cases to validate database & Lambda quality & logic in the existing architecture, achieving code coverage of 95%.
- Utilized AWS Relational Database Service (RDS) to deploy a database to hold workflow data.
- Utilized AWS Lambda & API Gateway to deploy CRUD Operations for key database resources that returns data in JSON format.

OtterView – Academic Project   Jan 2023 – May 2023
Cloud Computing, Microservices, AWS Technologies, Python
- Collaborated with a team of 4 to develop a user-friendly web application for finding the sentiment analysis of a specified event.
- Implemented backend with AWS Lambda processing Twitter comments via AWS Comprehend, storing data in DynamoDB.
- Created CloudFormation template for deploying application resources.
- Configured Python UI application runner for automatic CloudFormation deployment & user interaction, cutting application startup time by 75%.