Robert Davis Jr.

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SUMMARY

Full Stack Developer and DevOps Engineer with 15 years of experience building and deploying scalable software and infrastructure. Strong background in AWS cloud architecture, CI/CD pipeline automation, and containerization using Docker. Skilled in orchestrating robust deployment workflows, maintaining production environments, and enabling development velocity through infrastructure automation and monitoring. Experienced in collaborating with cross-functional teams to optimize systems for performance, reliability, and scalability.

PROFESSIONAL EXPERIENCE

IT Specialist (Software Engineer), U.S. Census Bureau
Suitland, MD | 2014–Present

- Architected and maintained CI/CD pipelines in collaboration with DevOps teams, enabling rapid and stable code deployments across QA, staging, and production.
- Migrated legacy monolithic applications to Docker-based microservices deployed on AWS cloud infrastructure.
- Automated the provisioning and configuration of AWS resources using launch configurations, security groups, and EC2 scaling policies.
- Managed deployments of containerized applications on Linux servers (Red Hat, Ubuntu, CentOS) using Docker and shell scripts.
- Built and maintained LAMP-based applications (Linux, Apache, MySQL, Perl, Node, Angular) across multiple environments.
- Collaborated with stakeholders to streamline deployment workflows and align infrastructure with development goals.
- Troubleshot production systems, identifying bottlenecks, analyzing logs, and improving system stability.
- Participated in regular Production Operations, Cloud Architecture, and DevOps meetings to ensure platform reliability.
- Led performance testing of cloud applications using AWS virtual scale groups and simulated user loads.

Systems Architect, SAUCE Concierge Services, LLC
Mitchellville, MD | 2015–2020

- Directed and implemented an IT strategy for a concierge start-up company.
- Served as Systems Architect to establish the best methodology to support the business' needs.
- Served as Full Stack (LAMP) Developer responsible for application (Linux, Apache, Python, MySQL).
- Migrated on-prem systems to AWS EC2 infrastructure, increasing uptime and system resilience.
- Developed cloud deployment strategies and implemented production-ready environments using Docker on AWS.
- Built Django web applications hosted on AWS (EC2), incorporating CDN (Cloudflare) for improved application delivery.

- Established backup and recovery workflows and improved infrastructure observability.

Systems Software Engineer, Space Telescope Science Institute
Baltimore, MD | 2011–2014

- Developed automated software tools to support the data pipeline for the James Webb Space Telescope (JWST).
- Lead developer on RESTful web service projects integrating Python and Java for NASA's space imaging systems.
- Built and tested applications on Red Hat Linux systems with a focus on system integration and reliability.
- I translated systems requirements into application prototypes.
- Developed test plans to verify login of new or modified programs.
- Conducted code reviews as part of routine quality assurance activities

Computer Technician, Centers for Disease Control and Prevention
Washington, DC | 2007–2011

- Supported CDC campuses with hardware and software troubleshooting, OS imaging, and Tier II escalation resolution.
- I provided on-site assistance, tracking calls, and analyzing call data for trends and common systems problems.

Data Analyst, Computer Sciences Corporation (CSC)
Hanover, MD | 2007

- Extracted and analyzed healthcare data using SQL, Unix shell scripting, and Autosys for job scheduling and automation.
- Primary responsibilities involved extracting and analyzing data/information from enrollment system and CRM to support the enrollment process for a healthcare management production operations department.
- Conducted analysis of healthcare data to identify and correct data anomalies and exceptions

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SKILLS

DevOps & Cloud Tools:
AWS (EC2, S3, IAM, CloudFormation), Docker, Jenkins, GitHub Actions, CI/CD Pipelines, CloudWatch, Log Analysis

Programming Languages & Frameworks:
Python, Django, FastAPI, Flask, Java, JavaScript, Node, Angular, HTML, CSS, Shell Scripting,

Infrastructure & Automation:
Linux (Red Hat, Ubuntu, CentOS), NGINX, Apache, Vagrant, Bash

Database & Storage:
MySQL, Postgres, Oracle, MongoDB

Version Control:
Git, SVN, CVS

CERTIFICATIONS & TRAINING

- AWS Certified Cloud Practitioner
- UMD Robert H. Smith School of Business – Artificial Intelligence and Career Empowerment

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EDUCATION

- BS, Computer & Information Sciences – University of Maryland Global Campus
- BA, Sociology – University of Pittsburgh

HONORS

- Bronze Medal – U.S. Census Bureau (2021)
- Special Projects Team Member – CDC IT Division