

ROBERT DAVIS JR.

Bowie, MD • (240) 305-3418 • r.m.davisjr@gmail.com

SKILLS

Languages & Frameworks: Python, FastAPI, Flask, Django, JavaScript, Node.js, Angular, Java, Shell Scripting, HTML/CSS
Cloud & DevOps: AWS (ECS Fargate, EC2, S3, RDS, IAM, ECR, CloudFormation, CloudWatch, Secrets Manager, Bedrock), Docker, Jenkins, GitHub Actions, CI/CD Pipelines
AI & LLM: OpenAI GPT-4, AWS Bedrock, RAG pipelines, LangChain, Prompt Engineering, Function Calling, MCP Servers, LLaMA 3.2, Gemma 3
Databases: MySQL, PostgreSQL, MongoDB, Oracle | **APIs & Integrations:** Stripe, Plaid, OpenAI, REST
Infrastructure: Linux (Red Hat, Ubuntu, CentOS), NGINX, Apache, Bash | **Version Control:** Git, GitHub, SVN

EXPERIENCE

Smata Systems LLC — Founder & Principal Engineer Mitchellville, MD
Oct 2025 – Present
Financial SaaS | AWS Cloud & Full-Stack Development

- Architected production AWS infrastructure using ECS Fargate, ALB across 6 AZs, RDS MySQL, Route 53, and ACM SSL/TLS, serving live users at smatasystems.com.
- Built full-stack financial management SaaS with 9 integrated tools: transaction categorization, AI assistant, analytics, net worth tracking, investment portfolio, budget analysis, and debt management.
- Integrated OpenAI GPT-4 and Anthropic claude-sonnet-4-5 for AI-powered financial insights with real-time streaming responses, prompt engineering for the financial domain, and context-aware assistance accessible across all pages.
- Implemented Stripe Checkout for subscriptions and Plaid OAuth for secure bank connections with automated transaction import and categorization.
- Established DevOps practices: Docker containerization, automated ECS deployments, CloudWatch logging, comprehensive test suite, and git-based CI/CD workflows.

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

- Designed and built CATR (Centurion Automated Ticket Runner), an agentic AI system using Python, FastAPI, and the Claude API that autonomously monitors GitHub Enterprise for issues, classifies them via LLM-based NLP, and executes resolution workflows — eliminating manual intervention on routine developer requests.
- Reduced team toil and freed engineers for higher-value work by automating repetitive developer ticket requests that previously required manual execution, delivering faster turnaround across the division.
- Architected and maintained CI/CD pipelines enabling rapid, stable deployments across QA, staging, and production; migrated legacy monolithic applications to Docker-based microservices on AWS GovCloud (Centurion V1).
- Automated provisioning of AWS resources (launch configs, security groups, EC2 scaling policies) and managed containerized deployments on Red Hat/Ubuntu Linux; built and maintained LAMP-based survey applications across multiple environments.

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

- Served as Full-Stack Developer and Systems Architect, directing IT strategy and implementing LAMP-stack applications (Linux, Apache, Python, MySQL).
- Migrated on-prem systems to AWS EC2, increasing uptime; built Django web applications hosted on AWS with Cloudflare CDN for improved delivery.

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

- Developed automated data pipeline tools for the James Webb Space Telescope (JWST); served as lead developer on RESTful web services integrating Python and Java for NASA imaging systems.

CERTIFICATIONS

AWS Certified Cloud Practitioner
AWS Certified AI Practitioner
UMD Robert H. Smith School of Business — Artificial Intelligence & Career Empowerment

EDUCATION

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