

ANDY AMPONSAH

DevOps Engineer | Cloud Infrastructure | SRE | SysAdmin

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Summary

DevOps Engineer with 3+ years of experience designing, building, and maintaining robust, scalable, and highly available cloud infrastructure on AWS (AWS Certified Cloud Practitioner). Expertise in automating mission-critical infrastructure through Infrastructure as Code (Terraform, CloudFormation) and streamlining deployments via containerization (Docker, Kubernetes) and CI/CD pipelines (Jenkins, GitHub Actions). Applies core SRE principles to enhance system reliability, performance, and monitoring, **resulting in a significant reduction in deployment times and improved uptime**. Brings a unique full-stack development perspective (Python, Django) to operational challenges, ensuring systems are designed for resilience, security, and cost-effectiveness from the ground up

Key Achievements

-  **CICD Pipelines Optimization**
Reduced deployment times by 40% using optimized CICD pipelines.
-  **Terraform Automation Achievement**
Reduced infrastructure setup time to only 15 minutes through Terraform automation.
-  **AWS Cost Reduction Efficiency**
Achieved 25% AWS cost reduction through optimized resource utilization and auto-scaling.
-  **Monitoring Solutions Excellence**
Improved incident response time by 60% with proactive alerting and monitoring solutions.

Experience

- Tap and Hops

Kumasi, Ghana

Cloud Systems Engineer | SRE

07/2025 - Present

 - Spearheaded the cloud infrastructure modernization, transitioning the organization from manual "Click Ops" to a fully automated, GitOps-driven IaC model using Terraform. Engineered and managed scalable EKS clusters, implementing advanced resource management and right-sizing strategies that **reduced cloud costs by 15%** without impacting performance. Architect and implemented robust CI/CD pipelines for automated Kubernetes manifest deployments, **slashing average deployment times by 35%** and enabling faster, more reliable release cycles. Established a foundation of infrastructure reliability, security, and operational efficiency
- AmaliTech

Kumasi, Ghana

DevOps Engineer

11/2024 - 07/2025

 - Designed and implemented CICD pipelines using Jenkins, reducing deployment times by 40% through parallel job execution and optimized build process
 - Automated infrastructure provisioning using Terraform and AWS CloudFormation, managing 50+ EC2 instances, RDS database, and S3 buckets across 3 environments
 - Implemented comprehensive monitoring solutions with CloudWatch and Prometheus/Grafana, reducing incident response time by 60% through proactive alerting
 - Containerized 15+ applications using Docker and orchestrated deployments with Kubernetes (EKS), improving scalability and resource utilization
 - Established DevOps best practices including infrastructure as code, immutable deployments, and blue-green deployment strategies
 - Reduced AWS costs by 25% through rightsizing instances, implementing auto-scaling, and optimizing storage solutions
- Cloud Engineering Fellow

Remote

Azubi Africa Talent Mobility Program Remote

07/2025 - Present

 - Essential cloud engineering training program with focus on AWS services, Linux administration, and DevOps methodologies
 - Designed and deployed highly available cloud architecture for web applications using AWS services (EC2, S3, RDS, Lambda)
 - Implemented automated backup solutions for critical data using AWS Backup and lifecycle policies
 - Collaborated with cross-functional teams on migration of legacy systems to cloud infrastructure
 - Developed security best practices including IAM policies, security groups, and encryption standards
 - Linux Administration
 - Python Scripting
- Kryotech Software Solutions

Ghana (Remote)

Founder & Lead Developer

03/2018 - Present

 - Architect, developed and deployed Django web applications with automated CICD pipelines using GitHub Actions and Jenkins
 - Implemented comprehensive automated testing frameworks (unit, integration, E2E) reducing production bugs by 35%
 - Migrated 8 legacy systems to AWS cloud infrastructure, improving scalability and reducing downtime by 90%
 - Led agile development team of 3 developers, implementing Scrum methodologies that improved delivery time
 - Provided cybersecurity consulting for SMBs, implementing security measures that prevented attempted breaches

Experience

National Service Secretariat	Kumasi, Ghana
Coding Instructor	03/2024 - 04/2025
- Developed and delivered comprehensive curriculum for Python programming fundamentals and web development - Taught full-stack development using HTML5, CSS3, JavaScript, and Django framework to 80+ students - Mentored students in software development best practices including version control, testing, and documentation	

Education

Wisconsin International University College, Ghana	Accra, Ghana
MS Information and Technology	09/2025 - Present
Specializing in the architectural principles and practical implementations of Cloud Computing, DevOps, Site Reliability Engineering (SRE), and Systems Administration. Conducting advanced academic research focused on optimizing infrastructure automation, enhancing system reliability, and developing cost-effective, scalable cloud solutions. Leveraging rigorous academic theory to solve complex operational challenges and bridge the gap between development and operations	
AmaliTech	Kumasi, Ghana
Devops Eng. GTP	04/2024 - 11/2025
Completed an intensive, project-based training program focused on the core principles of DevOps and cloud engineering. Gained hands-on, practical experience in building CI/CD pipelines, managing cloud infrastructure, and implementing automation tools. Solidified a strong foundational skill set in modern software delivery practices, agile methodologies, and collaborative development-operations workflows.	
AmaliTech Ghana	Location
Intensive 12-week cloud computing program covering AWS fundamentals	2024
- AWS re/Start Program Cloud Computing - AmaliTech Ghana - Intensive 12-week cloud computing program covering AWS fundamentals, Linux administration, networking, security - Python scripting, and automation. Completed hands-on labs and real-world projects	
University of Ghana	Location
Bachelor of Arts in Social Studies & History	2019 - 2023
Combined Major GPA: 3.55/4.0. Relevant coursework: Research Methods, Data Analysis, Critical Thinking	
Amazon Web Services	Location
AWS Certified Cloud Practitioner	2021 - 2024
University of Michigan	Africa
Python for Everybody Specialization	2021

Certification

Python for Everybody Specialization — University of Michigan
Linux Essentials — Linux Foundation
Statistics — Stanford University
Python web development curriculum development mentoring
Google IT Support Specialist
AWS Cloud Practitioner

Languages

English	Proficient	●●●●●	German	A1	●●●●●
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Skills

Agile · Ansible · Automated Testing · AWS · AWS Cloud · AWS EC2 · AWS Lambda · AWS Services · Bash · Chart.js · CircleCI · CloudFormation · CloudFront · CloudWatch · Code Review · Cybersecurity · Data Structures · Django · Docker · DynamoDB · E2E · EC2 · Encryption · Flask · Git · GitHub · GitLab · Grafana · HTML · IAC · IAM · JavaScript · Jenkins · JSON · Kubernetes · Linux · MongoDB · Modular · NoSQL · Numpy

Projects

Automated Cloud Infrastructure Provisioning System(ECS)

Terraform-based solution for rapid environment setup across AWS

- Developed modular Terraform templates for VPCs, EC2, RDS, S3, and security groups
- Reduced infrastructure setup time from 8 hours to 15 minutes for new environments
- Implemented state management with S3 backend and locking via DynamoDB
- Integrated with AWS Secrets Manager for secure credential management
- GitHub: https://github.com/guderian120/lamp_stack_infranstructure

Jenkins CI/CD Pipeline for Django Applications

End-to-end automation from commit to production

- Built multi-stage pipeline with parallel test execution
- Integrated SonarQube for static code analysis with quality gates
- Implemented blue-green deployment strategy with zero downtime
- Reduced deployment time from 15 minutes to under 2 minutes
- GitHub:https://github.com/guderian120/jenkins_pipeline

Cloud WorkSpace Provisioning System

- Built using Django, Pandas, and hosted on AWS EC2
- Integrated GitHub Actions for full CI/CD automation including testing and deployment
- Enabled sysadmins to provision/deprovision user workspaces with appropriate permissions
- Reduced onboarding time for new developers from 2 days to 30 minutes
- Github: https://github.com/guderian120/Bash_User_management_System

Socials



Github

<https://github.com/guderian120>



Personal Website

<https://andyamponsah.netlify.app/>



Linkden

<https://www.linkedin.com/in/andy-amponsah/>