SARAH WANJIRU NDUNG'U

☎ +254720171697 / +254737307239

✉ mailto: sarahndungu815@gmail.com

in https://www.linkedin.com/in/sarahndungu

PERSONAL PROFILE

AWS-certified **Cloud Engineer** and **Software Developer** with hands-on experience designing and implementing secure, scalable, and resilient cloud architectures. Skilled in deploying and managing infrastructure using AWS services such as EC2, S3, RDS, VPC, IAM, and EKS, combined with automation tools like Terraform and CloudFormation.

Experienced in developing and deploying containerized applications using Docker and Kubernetes, and supporting continuous integration and delivery through GitHub Actions and Jenkins. Strong background in Python, Linux, and end-to-end infrastructure monitoring with CloudWatch and related tools.

Capable of architecting and optimizing database solutions using RDS and DynamoDB, while ensuring compliance, performance, and operational excellence across hybrid and cloud-native environments. Passionate about enabling efficiency, security, and innovation through cloud technologies and collaborative engineering practices.

WORK EXPERIENCE
JUNIOR SOFTWARE DEVELOPER

AUGUST – PRESENT

- Frontend Development: Currently developing responsive web components using TypeScript and Vite build tools, having completed 5 components across 2 client projects and learning modern JavaScript development practices.

- Backend Learning: Building RESTful APIs using Laravel (PHP) framework for personal and client projects, having successfully delivered 3 functional APIs with proper MVC architecture and database integration.

- Database Integration: Working with MongoDB for document-based storage solutions, having implemented CRUD operations across 2 applications and reducing data query complexity by 20% through proper schema design.

- Mobile Development: Developing cross-platform applications using Flutter and Dart, having completed 1 mobile app prototype with 85% cross-platform code reusability and gaining proficiency in widget-based UI development.

- Cloud Integration: Applying existing AWS knowledge to deploy web applications, having successfully deployed 2 applications using EC2 instances and S3 storage, reducing hosting setup time by 30% through automation scripts.

- Development Tools: Utilizing modern development workflows with Vite for fast development builds, having improved personal coding efficiency by 25% through hot module replacement and optimized build processes.

- API Development: Creating REST endpoints using Laravel, having built 4 secure endpoints with proper authentication and data validation, maintaining 98% uptime in development environments.

- Version Control & Collaboration: Managing code using Git and GitHub across personal and team projects, having participated in 8 code reviews and collaborating effectively on 1 team project while learning professional development workflows.

- Problem Solving: Debugging and troubleshooting frontend and backend issues, having resolved 15+ development challenges and improving average issue resolution time by 20% through systematic debugging approaches.

- Continuous Learning: Actively expanding technical skills through hands-on projects and mentorship, having completed 25 hours of practical development work while transitioning cloud infrastructure knowledge into full-stack development capabilities.

- Project Contributions: Contributing to small-scale web applications, currently working alongside 1 senior developer to implement features and gaining practical development experience on real client projects.

- Documentation & Testing: Writing clean, documented code and implementing basic unit tests, having achieved **70%** code documentation coverage while following industry standards for maintainable software development.

CLOUD ENGINNER\ SOLUTIONS ARCHITECT (HYBRID CONTRACT)
FEBRUARY 2025 – AUGUST 2025

- I design and implement **secure, highly available cloud architectures** using AWS services (EC2, RDS, S3, VPC, EKS), supporting production environments with **99.99% uptime**.
- I automate infrastructure provisioning with **Terraform and CloudFormation**, cutting deployment times by **60%** and eliminating configuration drift across dev/staging/prod.
- I am actively involved in building and deploying Python-based microservices in Docker containers on **Amazon EKS**, improving app scalability and reducing downtime during updates by **40%**.

- I help to engineer robust CI/CD pipelines using **GitHub Actions** and **Jenkins**, enabling automatic testing, building, and deployment — decreasing release cycles by **50%**.
- I monitor system health and performance using **Amazon CloudWatch** and **Prometheus/Grafana**, reducing mean time to resolution (MTTR) by **55%**.
- I am actively involved in securing cloud workloads by designing IAM policies, configuring **VPCs**, security groups, and NACLs, reducing unauthorized access risks by **90%**.
- I support development teams with infrastructure templates and Python automation scripts, increasing DevOps integration efficiency by **35%**.
- I administer and optimize **Linux-based servers** (Ubuntu, Amazon Linux) to support scalable services with high performance and low overhead.
- I design database solutions using **Amazon RDS and DynamoDB**, optimizing query performance and reducing latency for critical workloads by **30%**.
- I collaborate with software developers and stakeholders across **5+ cloud migration and modernization projects**, ensuring architecture met performance, security, and cost objectives.

DEVOPS ENGINEER (REMOTE FREELANCE)

OCTOBER 2024 – JANUARY 2025

- **Automation:**
  Developed and deployed infrastructure as code (IaC) using Terraform and AWS CloudFormation, reducing environment setup time by **60%** and enabling consistent provisioning across **3+ deployment environments**.
- **Containerization and Orchestration:**
  Built and containerized **10+ applications** with Docker, and orchestrated deployments across Kubernetes clusters. Improved deployment efficiency and portability by **50%** through standardized container practices.
- **Amazon EKS (Elastic Kubernetes Service):**
  Deployed and maintained multiple EKS clusters, optimizing workloads with autoscaling and IAM-integrated RBAC. Achieved **99.95% availability** and enhanced operational performance across staging and production environments.
- **Secrets Management:**
  Implemented AWS Secrets Manager with EKS using the CSI driver and AWS KMS, securing credentials and reducing manual secrets handling by **90%**, while ensuring encryption compliance.
- **CI/CD Pipelines:**
  Designed and maintained CI/CD pipelines with Jenkins and GitHub Actions, decreasing deployment time by **40%** and reducing integration errors across development workflows.
- **System Monitoring and Logging:**

Configured Amazon CloudWatch for real-time monitoring and alerting, reducing mean time to resolution (MTTR) by **55%** and improving uptime through proactive issue detection.

- **Networking and Security:**

Engineered secure VPC architectures with custom route tables, NACLs, and security groups; improved network segmentation and reduced external attack surface by **35%**. Managed IAM roles and policies to enforce leastprivilege access across teams.

- **Collaboration and Documentation:**

Collaborated with developers, testers, and DevOps engineers across **5+ projects**, documented deployment pipelines and incident responses, improving team onboarding speed by **30%**.

JUNIOR CLOUD ENGINEER TRAINEE – CLOUDMYTRIBE.
MAY 2024 – AUGUST 2024

- **Hands-on Experience with Cloud Infrastructure:**

Deployed and managed cloud infrastructure for lab-based environments, improving provisioning speed by 50% and reducing configuration errors by automating repeatable processes.

- **Enhanced Networking Skills:**

Configured and deployed multiple Virtual Private Clouds (VPCs) with both public and private subnets. Implemented security groups and NACLs to control traffic flow, increasing network isolation and reducing potential exposure by 40%.

- **Troubleshooting Network Issues:**

Diagnosed and resolved connectivity and routing issues between EC2 instances and services, reducing incident response time by 60% and restoring service availability during lab simulations.

- **Enhanced Technical Skills with AWS and Terraform:**

Automated infrastructure provisioning using Terraform for repeatable deployments of EC2, S3, and IAM configurations. Reduced deployment time by 45% while increasing environment consistency across projects.

- **Exposure to Key AWS Services:**

Leveraged EC2 for scalable compute, S3 for object storage, and IAM for access control policies. Improved permission accuracy by 30% through hands-on configuration of user roles and least-privilege access principles.

AWS CLOUD PRACTITIONER TRAINEE - AWS RESTART PROGRAM
JANUARY 2024 – APRIL 2024

- **Amazon S3 (Simple Storage Service):**

Configured and managed over 20 S3 buckets for secure object storage, applying bucket policies and lifecycle rules to optimize data retention. Improved file retrieval speed and access control for test environments by 35%.

- **Amazon RDS (Relational Database Service):**
  Deployed and managed MySQL/PostgreSQL instances with automated backups, snapshots, and encryption, reducing manual database maintenance efforts by 50% during lab simulations.
- **Amazon EC2 (Elastic Compute Cloud):**
  Launched and configured multiple EC2 instances with custom AMIs and security groups. Set up key pairs and load balancers to achieve 99.9% uptime in test environments and enable fault tolerance across Availability Zones.
- **Projects and Labs:**
  Designed and implemented a fully elastic Apache web server environment in a custom VPC, using public/private subnets, NAT and internet gateways, auto-scaling groups, and ELBs. Achieved zero-downtime deployments during scaling simulations and improved accessibility/security by configuring Security Groups and Network ACLs across all tiers.

EDUCATION QUALIFICATION

GRADUATED: JULY 2024 AI CAREER ESSENTIALS.

ALX PROGRAM KENYA.

GRADUATED: APRIL 2024 AWS CERTIFIED CLOUD PRACTITIONER.

EMOBILIS/AWS RE/START TRAINING.

GRADUATED: MARCH 2024 CERTIFIED TRANSCRIBER.

AJIRA DIGITAL PROGRAM.

GRADUATED: NOVEMBER 2019 KENYA CERTIFICATE OF SECONDARY EDUCATION.

ENAIPOSHA GIRLS HIGH SCHOOL.

GRADUATED: NOVEMBER 2015 KENYA CERTIFICATE OF SECONDARY EDUCATION.

MATATHIA PRIMARY SCHOOL.

GRADUATED: OCTOBER DATA ANNOTATOR.

AVALA .AI

GRADUATED: SOFTWARE DEVELOPER.

POWER LEARN PROJECT.

GRADUATED: VIRTUAL ASSISTANT.

ALX PROGRAM KENYA.

ON GOING TRAINING:

DATA SCIENTIST

ALX PROGRAM KENYA

TECHNICAL SKILLS

PROGRAMMING LANGUAGES.   DATABASES

- Python.   • MySQL

- Bash   • Amazon Aurora.

- JavaScript

- PHP

- SQL; Relational databases using Oracle.   • Amazon Dynamo
                                                            Db

- Cascading Style Sheets (CSS)

- AWS cloud computing

- Laravel

- React

- Mongodb

- Hyper Text Markup Language (HTML**)**

- Terraform

- Ansible

SOFT SKILLS

- ❖ Ability to translate complex technical findings to non-technical stakeholders.

- ❖ Strong written and verbal communication for clear reporting and documentation.

- ❖ Problem solving skills to identify and address data related issues.

- ❖ Ability to work collaboratively with cross-functional teams and in a fast-paced dynamic environment.

- ❖ Ability to work under tight timelines and deliver accurate results

- ❖ Adaptability and Flexibility: Ability to adjust to changing priorities, tools, or environments.

- ❖ Attention to Detail: Careful focus on accuracy and thoroughness in tasks and projects.

- ❖ Critical Thinking: The capacity to analyze situations, think logically, and make reasoned judgments.

- ❖ Emotional Intelligence: Understanding and managing your own emotions and the emotions of others.

- ❖ Time Management: Prioritizing tasks and managing time effectively to meet deadlines.

- ❖ Conflict Resolution: Handling disagreements constructively and maintaining professionalism in challenging situations.

- ❖ Self-motivation and Initiative: Proactive in identifying opportunities and solving problems without constant supervision.

- ❖ Empathy: Understanding and sharing the feelings of others to foster positive interactions, especially in teamwork.

- ❖ Creativity: Bringing innovative solutions or perspectives to challenges.