Sharif Sule Ndlovu

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portfolio.devbridge.co.za

SOFTWARE DEVELOPER & CLOUD/DEVOPS ENGINEER

LinkedIn GitHub

Cloud and DevOps engineer and Python/Django developer who builds, releases and operates production platforms. I have delivered two live government systems — a multi-tenant citizen-services platform for the Office of the Premier, Mpumalanga, and a nationwide land-use platform for CoGHSTA. On both I am the sole infrastructure engineer, writing the AWS infrastructure, running deployments and monitoring production across QA, UAT and Production, with security scanning built into every release. I contribute to the application code and maintain e-PGLUM in production, taking solutions from development through to live operation.

> TECHNICAL PORTFOLIO — ENGINEERING CASE STUDIES
> Production infrastructure ownership, architecture decisions and the problems I solved, documented as proof of work.
> portfolio.devbridge.co.za

3	10	3	96
AWS CERTIFICATIONS	GOV. DEPARTMENTS SERVED	ENVIRONMENTS OWNED	GOV. SUBMISSION FORMS

SELECTED CONTRIBUTIONS

Sole infrastructure engineer — on two live government platforms — writing the AWS infrastructure, running deployments across QA, UAT and Production, and monitoring both in production.

Security-gated releases — on Livi: every image must pass pip-audit and a Trivy scan before it can be pushed.

Live migrations — moved running e-PGLUM and Livi environments from AWS Copilot to standalone CloudFormation without pausing development.

Production incident resolution — traced WAF rules blocking legitimate submissions at go-live through CloudFront and WAF logs, then applied production firewall parity to QA from day one on Livi.

CORE STACK

Python · Django · DRF · Celery · AWS · PostgreSQL · Docker · CloudFormation · Terraform · CI/CD

SKILLS

CLOUD & INFRASTRUCTURE

AWS (ECS Fargate, RDS, VPC, ALB, S3, EFS, CloudFront, Route 53, WAF, IAM, KMS), Azure fundamentals

INFRASTRUCTURE AS CODE

CloudFormation, Terraform, Bash automation

DEVOPS & CI/CD

GitHub Actions, Docker, release automation, multi-environment deployment

DEVSECOPS

Trivy, pip-audit, AWS WAF

MONITORING & OPERATIONS

CloudWatch, log analysis, production troubleshooting

PROGRAMMING & BACKEND

Python (expert), Django, DRF, Celery, ASGI/WSGI, Java, JavaScript, C# (.NET MVC), Kotlin, SQL

DATA & MESSAGING

PostgreSQL, PostGIS, MySQL, Redis, RabbitMQ, SQS

LINUX & SYSTEMS

Linux administration, server hardening, system troubleshooting

EXPERIENCE

Software Developer & Cloud/DevOps Engineer

2025 – Present

DevBridge (self-employed) · Pretoria, South Africa

Livi — Multi-Tenant Citizen-Services Platform

LIVE · LIVILEMPHAKATSI.CO.ZA

Case management for the Office of the Premier, Mpumalanga — citizens submit by web and mobile; ten departments resolve through branded portals. Sole infrastructure engineer; contributor to the application.

Infrastructure, deployment and monitoring — wrote the AWS infrastructure in CloudFormation, ran dev, stage and production deployments through GitHub Actions, and monitor the platform in production.

Security-gated releases — built the release pipeline so every image passes dependency scanning (pip-audit) and a Trivy container scan; an image that fails cannot be pushed.

Firewall parity from day one — applied the lesson from e-PGLUM by running the production WAF rules in QA, so blocked requests surface during internal testing and turnaround dropped from days to hours.

Multi-tenancy — contributed to the design: one Django deployment serving 10 departments across 30 subdomains, with isolated authentication and per-department branding.

Automation and integration — SLA escalation that finds and escalates overdue cases without manual triage; mobile integration moved from SQS to RabbitMQ mid-project, with rebuilt payload schemas and audit logging.

Upload screening — added an automated pipeline that screens every image, video and PDF with AWS Rekognition before it is processed; flagged files are rejected and deleted. Videos are staged only briefly in an auto-expiring bucket and removed after analysis.

Realtime and design — live case chat over Server-Sent Events. With the team, chose a simple status-driven case model over external workflow engines.

CERTIFICATIONS

AWS Certified Solutions Architect — Associate

AWS Certified Developer — Associate

AWS Certified Cloud Practitioner

Microsoft Certified: Azure Fundamentals (AZ-900)

CompTIA Network+

CompTIA Project+

Microsoft AI Skills Fest — Building AI Agents

PROFESSIONAL DEVELOPMENT

IN PROGRESS — 2026

AZ-104 Azure Administrator

WORKING TOWARDS — 2027

CompTIA Linux+, HashiCorp Terraform Associate, Kubernetes & Helm, Prometheus & Grafana, OpenTelemetry, Jenkins, advanced DevSecOps, reliability engineering (SLIs, SLOs, error budgets). Red Hat RHCSA to follow.

e-PGLUM — Planning & Land-Use Management

EPGLUM.CO.ZA

Nationwide land-development and building-plan system for South African municipalities, replacing a paper-based process. Live for CoGHSTA, Mpumalanga. Sole infrastructure engineer; backend contributor in a team of seven; now sole maintainer in production.

Infrastructure, deployment and monitoring — wrote and run the AWS environments across QA, UAT and Production, including deployments and production monitoring.

Sole maintainer since go-live — I handle bug fixes and new features for the live platform.

Infrastructure migration — started on AWS Copilot, then moved the live environments to standalone CloudFormation with reusable deployment scripts ahead of Copilot's end of life, while the codebase stayed in active development.

Production incident — diagnosed WAF rules blocking legitimate submissions at go-live from the CloudFront and WAF logs and wrote scoped exclusions; tuned timeouts across CloudFront, the load balancer and Gunicorn for uploads over 20 MB.

Workflow and reporting — contributed to the configurable workflow engine across the 96-form codebase; moved report generation off the request cycle so it no longer times out; automated nightly operational statistics to the national broker.

The Workplace Basics — Commerce & Publishing

Django e-commerce and publishing platform for public-sector educational content (sole developer). The client cancelled before go-live; it became the technical groundwork for the government systems that followed.

Payments & subscriptions — built the full Paystack subscription lifecycle with signature-verified webhooks and tiered free and premium access.

Async & media — S3 media pipeline with presigned URLs, Celery and Redis background jobs, Dockerised with Compose.

DOSSIER

Full technical write-up of these systems: technical portfolio (PDF)

AVAILABILITY

Open to opportunities; available for hybrid or remote work in the Centurion / Pretoria area.

Community Web Modernization

6 SITES · PRO BONO

Programme modernising outdated, insecure websites for schools, churches, NGOs and sports clubs. Delivered six static sites on Cloudflare with no server or database to attack, and handed over full source-code ownership so each organisation can maintain its own site. devbridge.co.za/community · Example: rehobothboerdery.co.za

PERSONAL PROJECTS

Self-directed, public on GitHub.

siteward — self-hostable passive web security scanner: standard checks on a URL, with JSON, Markdown and HTML export.

speedward — self-hostable website performance tester with a global map.

NetPulse — Django platform that discovers and monitors devices on a local network, with background scanning.

Remote Workstation Anywhere — wake and connect to a home desktop with Tailscale, Wake-on-LAN, RDP and a Raspberry Pi gateway.

AWS Playground — dozens of AWS services explored through the CLI, infrastructure as code and SDKs.

Terraform Associate — code-first study notes and runnable examples.

Knowledge Base — the notes I keep on cloud, Linux, DevOps and security, published as a public reference site.

ELSEWHERE

devbridge.co.za

portfolio.devbridge.co.za

knowledgebase.devbridge.co.za

github.com/sharifndlovu123

LinkedIn — Sharif Ndlovu

EDUCATION

Varsity College
2021 – 2023

BSc Computer & Application Development — software engineering, cloud development (Azure), network engineering, advanced databases, Android (Kotlin), application security, IT project management, C# (MVC).

University of Pretoria
Jan – Jun 2025

Short course — Programming Languages & Artificial Intelligence.

Abbotts College
Completed

High school — IT & computer science (Delphi, console and PC application development).

SELECTED ACADEMIC PROJECTS — ARTIFICIAL INTELLIGENCE, UNIVERSITY OF PRETORIA

Genetic Algorithm Stock Trader — genetic-programming system evolving trading strategies via tournament selection, crossover and mutation, scored on F1 fitness (Java). Group assignment; I built the genetic-programming model.

Vehicle Routing Optimizer — ant-colony-optimization solver for multi-vehicle routing with time constraints and dynamic pheromone-trail management (Java).

TSP Metaheuristic Solver — simulated annealing against tabu search on the Travelling Salesman Problem, with seeded benchmarking (Java).

REFERENCES

Ronald Conco ARCHITECT · LEAD	Gave architectural direction on the e-PGLUM and OTP projects.
Miyelani Maphophe SENIOR DEVELOPER	Worked alongside on both the e-PGLUM and OTP projects.
Tharage Godfrey SENIOR DEV · PM	Assigned and coordinated project work on e-PGLUM and OTP.

Contact details available on request.

CONTACT

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