SHARIF SULE NDLOVU

Software Developer | AWS Solutions Architect | DevOps Engineer

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PROFESSIONAL SUMMARY

Software Developer and AWS Solutions Architect with extensive experience building enterprise-grade government and municipal systems. Specialized in Django web applications, cloud infrastructure (AWS), and DevOps practices. Proven track record delivering mission-critical platforms deployed across South African municipalities, including nationwide land use management and multi-tier case management systems serving citizens and government officials.

PROFESSIONAL EXPERIENCE

Software Developer & Cloud Architect

DevBridge (Independent Practice) | Pretoria, South Africa | *2021 - Present*

e-PGLUM - Government Land Application System

Comprehensive Django web application for government land applications, deployed across the majority of districts and local municipalities in South Africa.

- Designed and implemented Excel & PDF reporting system for statistics and analytics
- Built role-based access control and comprehensive user management system
- Architected and deployed AWS infrastructure for cloud hosting and resource management
- Developed workflow automation for internal government processes at various stages
- Implemented nightly statistics reservoir updates via queue systems (Celery/RabbitMQ)

OTP - Government Case Reporting System

Multi-tier case management platform enabling citizens to report issues to government departments with intelligent routing based on municipality and ward numbers.

- Developed comprehensive case management system with full CRUD functionality for issue tracking
- Built Django REST Framework API for mobile application integration with token authentication
- Implemented automated timeline tracking using Django signals for case lifecycle management

- Architected Celery-based queue system with AWS SQS polling for mobile app synchronization
- Designed multi-level routing system connecting citizens to municipal departments and Office of the Premier
- Deployed and managed AWS cloud infrastructure including Fargate, Lambda, and CloudWatch

The Workplace Basics - Educational Government Platform

Django-based educational platform and blog covering government-related topics including public administration, policy, and accountability.

- Integrated Paystack payment gateway with webhook processing for secure transactions
- Built e-commerce platform for educational content and resource marketplace
- Implemented ASGI support for async capabilities and real-time features
- Developed responsive, mobile-first user interface using Bootstrap

TECHNICAL SKILLS

Programming Languages: Python (Expert), Java, Delphi

Frameworks & Libraries: Django, Django REST Framework, Celery, Bootstrap

Databases: PostgreSQL, MySQL, PostGIS, Redis

Cloud & AWS: ECS Fargate, Lambda, SQS, CloudWatch, ElastiCache, Route 53, Parameter Store, S3, IAM, CloudFormation

DevOps & Tools: Docker, Git, CI/CD, Jenkins, AWS Copilot

Message Queues: RabbitMQ, AWS SQS, Celery Task Queue

Development Practices: Agile Methodologies, Infrastructure as Code, API Design

CERTIFICATIONS

- AWS Certified Solutions Architect - Associate
- AWS Certified Developer - Associate
- AWS Certified Cloud Practitioner
- CompTIA Network+
- CompTIA Project+

EDUCATION

Bachelor of Computer and Application Development

Varsity College | *2021 - 2023*

Short Course - Programming Languages & Artificial Intelligence

University of Pretoria | *January 2025 - June 2025*

SELECTED ACADEMIC PROJECTS

- **Genetic Algorithm Stock Trading System:** Implemented genetic programming system to evolve optimal trading strategies using tournament selection, crossover, and mutation operators with F1-score fitness evaluation
- **Vehicle Routing Optimizer (ACO):** Developed ant colony optimization solver for vehicle routing with time constraints, dynamic pheromone trail management, and multi-vehicle route coordination
- **TSP Metaheuristic Solver:** Implemented and compared Simulated Annealing and Tabu Search algorithms for Traveling Salesman Problem optimization

ADDITIONAL INFORMATION

- Location: Available for hybrid work in Centurion/Pretoria area
- Portfolio: https://portfolio.devbridge.co.za