

MZOKHULAYO MDUBEKI

Junior Cloud Engineer & Full Stack Developer

Dolomite Avenue, Wilro Park, Roodepoort, Gauteng

073 464 1075 | nkulumdubeki2017@gmail.com

[LinkedIn](#) | [GitHub](#)

PROFESSIONAL SUMMARY

AWS-certified Cloud Engineer with 1.5+ years of production experience designing, deploying, and managing enterprise-scale cloud infrastructure using Terraform and AWS services. Strong full stack development foundation from comprehensive Software Engineering diploma (NQF 5) covering web development, mobile applications, and distributed systems in Python and Java. Proven ability to deliver scalable, secure solutions from frontend to backend, combining cloud infrastructure expertise with software development capabilities. Experienced in CI/CD automation, RESTful API development, and implementing Infrastructure as Code for rapid, reliable deployments.

TECHNICAL SKILLS

Cloud Platforms & Infrastructure

- AWS Services: EC2, ECS, S3, Glue, CloudWatch, IAM, Lambda
- Infrastructure as Code: Terraform (production deployments)
- Cloud Architecture: Design, deployment, monitoring, and optimization
- Container Orchestration: Docker, ECS

Full Stack Development

- Backend: Python, Java, Node.js, RESTful API development
- Frontend: HTML, CSS, JavaScript, responsive web design
- Frameworks: Experience with modern web frameworks from WeThinkCode curriculum
- Databases: Relational databases (SQL), NoSQL concepts, data modeling

DevOps & Automation

- CI/CD Pipelines: GitHub Actions with npm audit and SonarQube integration
- Version Control: Git, GitHub collaborative workflows

- Monitoring: AWS CloudWatch dashboards, log analysis
- Code Quality: SonarQube quality gates, automated testing

Enterprise Systems & Security

- Identity & Access Management: Keycloak configuration and user provisioning
 - Microsoft 365 Administration: Global Administrator, SharePoint, Exchange, Azure
 - ServiceNow Platform: Administration and user management
 - Security Mindset: Google Cybersecurity Professional Certificate (in progress)
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PROFESSIONAL EXPERIENCE

Junior DevOps and Cloud Engineer

Electronic Connect Pty Ltd (ec1) | Bryanston, Gauteng | September 2025 – Present

Cloud Infrastructure & Automation

- Design, deploy, and manage AWS infrastructure using Terraform for automated, scalable deployments following Infrastructure as Code best practices
- Build AWS monitoring dashboards with Terraform providing real-time infrastructure visibility, alerting, and performance tracking
- Configure and optimize AWS Glue jobs for automated data processing, monitoring cron execution and verifying successful file and invoice processing
- Ensure compliance with regulations and maintain accurate audit records for all infrastructure changes

CI/CD & Development Operations

- Maintain and enhance GitHub Actions CI/CD pipelines implementing npm security audits and SonarQube quality gates for comprehensive code quality assurance
- Implement automated testing, security scanning, and deployment workflows reducing manual intervention and deployment time
- Collaborate with cross-functional teams supporting IT operations and business service automation initiatives

Identity, Access & Enterprise Systems Management

- Configure and manage Keycloak IAM systems, provisioning users and profiles for secure authentication across enterprise applications

- Serve as M365 Global Administrator managing Microsoft 365, SharePoint, Azure infrastructure, user administration, and Exchange mailbox management
- Administer ServiceNow platform managing user access, configuration, and integration with internal systems
- Provide HALO Help Desk support for City of Johannesburg ensuring timely resolution of infrastructure and application issues

Intern: Cloud and DevOps Engineer

Electronic Connect (ec1) | Bryanston, Gauteng | August 2024 – August 2025

- Developed AWS cloud infrastructure using Terraform automating deployments and implementing IaC practices
 - Collaborated with cross-functional teams supporting IT operations and business service automation
 - Managed M365 and SharePoint Administrator accounts for company-wide operations
 - Completed AWS SysOps Administrator training expanding cloud operations expertise
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EDUCATION & TRAINING

NQF 5 Diploma in Systems Engineering / Software Engineering

WeThinkCode | September 2021 – December 2022

Comprehensive Full Stack Curriculum:

- **Year 1:** Programming fundamentals, software design patterns, algorithms, and data structures
- **Year 2:** Web and mobile development, DevOps practices, cloud computing, and distributed systems
- **Core Languages:** Python (primary) and Java
- **Full Stack Focus:** Frontend and backend development, database design, API development, and deployment strategies

AWS re/Start Program & AWS Cloud Practitioner Certification

UCT Digital Bootcamps and Amazon Web Services | August 2022 – October 2022

- **AWS Certified Cloud Practitioner** (Current)

- Comprehensive AWS fundamentals, cloud architecture, and deployment strategies

Google Cybersecurity Professional Certificate

Nemisa Google Cybersecurity Program | March 2025 – June 2025

- Cyber/Computer Forensics and Counterterrorism
- Security fundamentals, threat detection, and incident response

Data Science Skills Programme Certificate

Deviare | June 2019 – April 2021

- Data Science and Business Intelligence
 - 4IR Skills Programme (Department of Communications)
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TECHNICAL PROJECTS & ACHIEVEMENTS

Enterprise Cloud Infrastructure (Production)

Technologies: Terraform, AWS (EC2, S3, CloudWatch, IAM), GitHub Actions

- Architected and deployed production AWS infrastructure serving City of Johannesburg operations
- Implemented Infrastructure as Code reducing deployment time and infrastructure drift
- Designed monitoring dashboards providing real-time visibility into system health and performance
- Maintained zero-downtime deployments through automated testing and rollback capabilities

Automated CI/CD Pipeline with Quality Gates

Technologies: GitHub Actions, npm, SonarQube, YAML

- Built comprehensive CI/CD workflows automating testing, security scanning, and deployments
- Integrated SonarQube code quality analysis establishing quality gates for production releases
- Implemented npm security audits catching vulnerabilities before production deployment

- Reduced manual deployment effort by 70% through automation

AWS Data Processing Pipeline

Technologies: AWS Glue, Python, S3, CloudWatch

- Managed automated data processing workflows handling large-scale invoice and file processing
- Monitored cron job execution ensuring reliable scheduled processing
- Implemented error handling and logging for troubleshooting and audit compliance
- Optimized job performance reducing processing time and costs

RESTful API Development & Integration

Technologies: Python, Java, REST APIs

- Developed robust RESTful APIs for system integrations during WeThinkCode training
- Implemented secure authentication and authorization mechanisms
- Designed scalable API architectures following industry best practices
- Created comprehensive API documentation for team collaboration

CERTIFICATIONS & CONTINUOUS LEARNING

- AWS Certified Cloud Practitioner | Amazon Web Services | Current
- Google Cybersecurity Professional Certificate |
- Foundations of Cybersecurity | Completed
- Core Java | Simplilearn
- Cybersecurity Fundamentals | Completed
- Machine Learning Advanced Certification Training | Simplilearn

KEY STRENGTHS

Cloud Engineering Excellence

- Production AWS infrastructure management with Terraform IaC
- Container orchestration with ECS for scalable application deployment

- Comprehensive understanding of AWS services and cloud architecture patterns
- Security-first approach to cloud infrastructure design

Full Stack Development Capabilities

- Strong backend development experience in Python and Java
- Web and mobile application development from WeThinkCode curriculum
- RESTful API design and implementation
- Frontend development with HTML, CSS, JavaScript
- Database design for both relational and NoSQL systems

Problem-Solving & Troubleshooting

- Analytical approach to complex technical challenges
- Root cause analysis for infrastructure and application issues
- Systematic debugging across full technology stack
- Proactive monitoring and issue prevention

Collaboration & Communication

- Cross-functional team collaboration in enterprise environment
- Clear technical documentation and knowledge sharing
- Customer service experience from HALO Help Desk support
- Mentorship-driven learning mindset

ADDITIONAL EXPERIENCE

Office Manager & K53 Driving Test Learners Instructor

Golden Ticket Driving Institute | Durban, KwaZulu-Natal | September 2023 – September 2024

- Managed office administration, scheduling, and customer service operations
- Handled financial transactions, record-keeping, and compliance documentation
- Demonstrated strong organizational and communication skills in customer-facing role

Data Science Trainee

Deviare | Durban Area | June 2019 – June 2020

- Completed comprehensive Data Science qualification training
 - 4IR Skills Programme in partnership with Department of Communications
 - Foundation in data analysis, business intelligence, and machine learning concepts
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PROFESSIONAL ATTRIBUTES

Lifelong Learner: Continuously expanding skillset across cloud, development, and security domains

Security-Conscious: Approaching system design with cybersecurity principles from day one

Automation-Focused: Building scalable, maintainable solutions through IaC and CI/CD

Eager to Grow: Thriving in environments emphasizing mentorship and continuous learning

Cross-Disciplinary Thinker: Understanding interconnections between development, infrastructure, and security

REFERENCES

Available upon request