

# THOBILE NDODA SEMA

## Cloud Engineer

Johannesburg, Gauteng | +27 83 813 3619 | [thobilesema@gmail.com](mailto:thobilesema@gmail.com)

---

### PROFESSIONAL SUMMARY

---

Cloud Engineer with a background in software development, Linux administration, and infrastructure support. Experienced in building and maintaining web applications, managing hosted environments, administering Linux servers, and supporting application deployments. Skilled in networking fundamentals, Git, troubleshooting, and server management, with hands-on experience using AWS services including Amazon S3, CloudFront, IAM, and EC2 through practical projects and cloud training. Leveraging a software engineering foundation to transition into cloud infrastructure and platform engineering, with a strong interest in scalable, reliable, and secure cloud solutions.

### KEY SKILLS

---

#### Cloud Platforms

- Amazon Web Services (AWS)
- Amazon S3
- Amazon EC2
- Amazon CloudFront
- AWS IAM
- Cloud Computing Fundamentals
- Shared Responsibility Model

- Infrastructure as a Service (IaaS)
- Cloud Security Fundamentals

### **AWS Services**

- Amazon Route 53
- Amazon VPC
- Amazon RDS
- AWS Lambda
- Amazon CloudWatch

### **Operating Systems**

- Linux Administration
- Ubuntu Server
- Linux Command Line (CLI)
- User and Group Management
- File System Management
- Process Management
- Package Management
- Microsoft Windows

### **Networking**

- TCP/IP Fundamentals
- DNS Management
- HTTP/HTTPS
- DHCP Fundamentals
- Subnetting Concepts
- Routing Fundamentals
- Network Ports and Protocols
- Client-Server Architecture

- SSL/TLS Fundamentals
- Network Troubleshooting
- Connectivity Testing (Ping, Traceroute, nslookup)

### **Servers & Infrastructure**

- Server Administration
- Virtual Server Management
- Infrastructure Support
- Hosting Environment Management
- Application Deployment
- Web Server Configuration
- Email Server Configuration
- Domain Management
- System Monitoring
- Performance Troubleshooting

### **DevOps & Automation**

- Git
- GitHub
- Version Control Workflows
- CI/CD Fundamentals
- Deployment Pipelines
- Release Management Concepts
- Infrastructure Automation Fundamentals

### **Security**

- Identity and Access Management (IAM)
- Access Control Principles
- Authentication and Authorization

- Basic Security Hardening
- Cybersecurity Fundamentals
- Vulnerability Awareness
- Secure Configuration Practices

### **Databases**

- MySQL
- PostgreSQL
- MongoDB
- Oracle SQL
- Database Administration Fundamentals
- Backup and Recovery Concepts

### **Programming & Scripting**

- PHP
- JavaScript
- Python
- Java
- Kotlin
- REST API Integration
- Backend Development

### **Monitoring & Troubleshooting**

- Log Analysis
- Incident Investigation
- Root Cause Analysis
- System Diagnostics
- Performance Monitoring
- Technical Support

## Professional Skills

- Problem Solving
- Analytical Thinking
- Communication
- Collaboration
- Documentation
- Continuous Learning
- Stakeholder Engagement

## PROFESSIONAL EXPERIENCE

---

### Software Developer

#### **4levels Solutions | May 2024 – Dec 2025**

- Developed and maintained business applications using PHP, JavaScript, MySQL, and related web technologies.
- Deployed and maintained web applications in Linux-based hosting environments.
- Administered cPanel hosting environments, including domain management, email services, user accounts, and hosting configurations.
- Managed DNS records, domain configurations, and website deployments to support business applications.
- Supported Infrastructure-as-a-Service (IaaS) hosting environments, ensuring application availability and reliability.
- Configured and maintained email hosting services, user mailboxes, and email routing.
- Performed troubleshooting and root cause analysis for application, server, and hosting-related issues.
- Collaborated with stakeholders to gather requirements and deliver technical solutions aligned with business needs.
- Conducted application testing, validation, and production support activities.
- Utilized Git and GitHub for source control, collaboration, and deployment workflows.

### **IT Support & Systems Technician (Freelance)**

- Provided technical support for websites, hosting environments, and end-user systems.
- Assisted clients with domain registration, DNS configuration, and hosting management.
- Configured email hosting services and resolved email delivery issues.
- Supported website deployments and maintenance activities.
- Diagnosed and resolved system, hosting, and connectivity issues.
- Assisted users with software, hardware, and system configuration challenges.

## **EDUCATION**

---

### **Advanced Diploma in Computer Science**

Tshwane University of Technology – In Progress

Gained exposure to the fundamentals of Data Science through academic study and practical learning.

### **Diploma in Computer Science**

Tshwane University of Technology - 2024

- **Best Learner Award (First and Second Year):** Recognized for outstanding academic performance and consistently achieving top results across multiple modules, including programming-related courses.
- **Hackathon Participation:** Actively participated in several hackathons, applying problem-solving and programming skills to develop innovative solutions while collaborating with team members under strict time constraints.
- **Work Integrated Learning (WIL):** Successfully completed Work Integrated Learning, gaining practical exposure to real-world software development environments and professional workflows.

- **Practical Projects and Assignments:** Completed multiple hands-on projects and technical assignments that involved developing software applications, implementing algorithms, and solving real-world problems.
- **Technical Skill Development Through Projects:** Gained practical experience in object-oriented programming, database management, and web development through coursework and project-based learning.

## **NSC Certificate**

Tlakale Mashashane Secondary School - 2021

- Successfully completed the National Senior Certificate (Matric) in 2021, demonstrating strong academic performance across multiple core subjects.
- Studied a broad range of subjects including Sepedi (Home Language), English (First Additional Language), Life Orientation, Mathematics, Life Sciences, Physical Sciences, and Geography, providing a balanced foundation in both analytical and scientific disciplines.
- Received school-level academic certificates in recognition of outstanding performance and excellence in Mathematics, Physical Sciences, and Life Sciences.
  - Awarded official academic recognition by the government education circuit for achieving distinctions in both Mathematics and Physical Sciences, reflecting high performance at a district level.

## **PROJECTS**

---

## **AWS Static Website Hosting**

Technologies: AWS S3, CloudFront, IAM, Route 53

- Designed and deployed a static website using Amazon S3.
- Configured IAM users and permissions following least-privilege principles.
- Integrated Amazon CloudFront to improve content delivery and enable HTTPS access.
- Managed DNS configuration and custom domain integration.
- Implemented website deployment and maintenance through AWS services.
- Gained practical experience with cloud storage, content delivery networks, identity management, and web hosting.

## **Personal Portfolio Deployment**

Technologies: Cloudflare Pages, GitHub, DNS Management

- Deployed and maintained personal portfolio websites in production environments.
- Configured custom domains, DNS records, and HTTPS certificates.
- Managed version-controlled deployments using Git and GitHub.
- Performed troubleshooting and maintenance to ensure website availability and accessibility.

## **Infrastructure & Hosting Administration**

Technologies: Linux, cPanel, DNS, Email Hosting

- Administered hosting environments supporting multiple websites and business applications.
- Managed domains, DNS records, email services, and user accounts.
- Performed server configuration, troubleshooting, and maintenance activities.
- Supported application deployment and operational stability within hosted environments.

## **MmaMori**

-A salon management system that enables customers to schedule appointments for hair treatments, allowing them to arrive at a specific time and avoid waiting in long queues. It also helps the salon track and manage operational statistics more efficiently.

## **BuildUp**

-A system designed to simplify the connection between service providers and those seeking services. Instead of physically searching for someone to help, users can easily find and connect with the right service provider through the app.

## **Smart Campus**

- A system that streamlines communication within the higher learning campus, enabling easy reporting of issues, efficient timetable management, classroom bookings, and more—all in one platform.

## **LANGUAGES**

---

- **English:** Intermediate proficiency (spoken and written)
- **Sepedi:** Fluent (spoken and written)
- **Ndebele:** Fluent (spoken and written)
- **Zulu:** Intermediate proficiency (spoken and written)

## **CERTIFICATIONS AND TRAININGS**

---

### **AWS SimuLearn: Cloud Computing Essentials**

#### **Amazon Web Services (AWS)**

- Gained foundational knowledge of cloud computing concepts and AWS services.
- Explored cloud architecture, shared responsibility model, scalability, availability, and security principles.
- Developed practical understanding of AWS services including S3, EC2, IAM, and CloudFront.

#### **AWS re/Start Program (In Progress)**

- Developing practical skills in cloud computing, Linux, networking, security, automation, and AWS services.
- Building hands-on experience with cloud infrastructure and operational best practices.

## **Cisco Introduction to Cybersecurity**

- Learned cybersecurity fundamentals, security principles, threat identification, and risk management concepts.

## **Cisco Cyber Threat Management**

- Studied cyber threats, attack vectors, security controls, and incident response fundamentals.

## **Additional Certifications**

- JavaScript Certificate
- CSS Certificate
- Hackathon Participation Certificate

## **PROFILES**

---

### **GitHub:** [github.com/tnsema](https://github.com/tnsema)

- Personal projects, software development work, cloud projects, and technical learning repositories.

### **LinkedIn:** [linkedin.com/in/tnsema](https://www.linkedin.com/in/tnsema)

- Professional profile, experience, certifications, and career development.

### **Credly:** [credly.com/users/thobile-sema](https://credly.com/users/thobile-sema)

- Industry badges and technical certifications.

### **Portfolio:** [cloud.thosem.com](https://cloud.thosem.com)

- Personal portfolio showcasing projects, technical skills, certifications, and professional experience.

## **REFERENCES**

---

References available upon request