

# Mthokozisi Nxumalo

073 778 9400  
nxumalomthokozisi7@gmail.com  
[www.linkedin.com/in/mthokozisi-nxumalo/](https://www.linkedin.com/in/mthokozisi-nxumalo/)  
Johannesburg, Gauteng

## EXPERIENCE

September 2025 Current	<b>Junior Software Engineer   Pycentric</b> <ul style="list-style-type: none"><li>Deployed a highly available, containerized AWS architecture using a multi-AZ ALB and EC2 instances. Secured the application via API Gateway as a reverse proxy and AWS Cognito for authentication. Automated image deployment and management across the fleet using an enhanced CI/CD pipeline and AWS Systems Manager (SSM).</li><li>Implemented monitoring and observability using CloudWatch and (Prometheus, Grafana and Loki), tracking system logs, application metrics, and alerts to proactively detect and resolve issues.</li></ul> <p><i>Flutter, FastAPI, Python, MongoDB, Docker, CI/CD, AWS, Nginx, CloudWatch, Grafana, Prometheus, Loki, Promtail, Linters, Agile</i></p>
October 2024 September 2025	<b>Graduate Software Engineer   Pycentric</b> <ul style="list-style-type: none"><li>Developed scalable Flutter applications adhering to MVC standards and employing Riverpod for robust state management. Delivered key performance gains by implementing API optimization techniques leading to a faster more responsive user experience.</li><li>Delivered backend services using FastAPI and MongoDB, integrating seamlessly with Flutter-based client applications.</li><li>Engineered a robust, secure authentication submodule leveraging OAuth 2.0 support for third-party identity integration. The flow utilized JWTs for stateless session management and refresh tokens for long-term secure user authorization, minimizing token theft risk and maximizing security posture</li><li>Supported CI/CD workflows and DevOps operations through containerization, testing, and version control best practices.</li><li>Engineered a FastAPI backend automating image-to-3D model conversion using Wonder3D and Blender, implementing texture-preserving GLB export and optimizing the workflow for upload efficiency and reliability.</li></ul> <p><i>Flutter, FastAPI, Python, MongoDB, MVC, Docker, Unit Testing, S3 bucket, CI/CD, Agile, Grafana, Swagger, Linux</i></p>
August 2023 December 2023	<b>Java Tutor   University of KwaZulu-Natal</b> <ul style="list-style-type: none"><li>Java Tutor for the school of Computer Science and Information Technology</li></ul> <p><i>Graduated 21 Dec 2023</i></p>

## EDUCATION

### Bsc Computer Science & IT | University of KwaZulu-Natal

*Graduated : 21 Dec 2023*

### High School | Sunnyside Secondary School

## SKILLS

### PROGRAMMING LANGUAGES | Python, Dart, Java, C++, C#, Javascript, ASP.NET, HTML ,CSS

### PYTHON ECOSYSTEM | FastAPI Streamlit, Typer/TyperCLI, Numpy, Pandas, threading, multiprocessing, Jupyter Notebook, Jupyterlab, Pytest, flake8, black

### DART | Flutter

### VERSION CONTROL : Git , Github

### MONITORING | Grafana, Prometheus, Loki, Promtail, Amazon CloudWatch

### DATABASES | MongoDB, MySQL, Redis

### CLOUD / COMPUTE | Amazon EC2, Google Compute Engine (GCE), Google Cloud Run

### INFRASTRUCTURE AS CODE : Cloud Formation, Terraform

### CONTAINERISATION | Docker , Docker compose

### CI/CD | GitHub Actions, Docker pipelines, Linters

### API DESIGN & INTEGRATION | RESTful APIs, JSON, Swagger, Postman, curl

### TESTING : Unit Testing , Integration Testing

### OPERATING SYSTEMS/IDEs | Debian/Ubuntu Distros, Linux, Mac OS, Windows , Android, Android Studio, VS Code, PyCharm,

### PRESENTATION/COMMUNICATION | Jira, Confluence, Markdown , Office(Word , Excel , PowerPoint)

## PROJECTS

---

### Localoop | (Personal Project)

*Link: [Localoop Demo](#)*

A location-based community chat platform that connects people through the places they visit. Instead of generic social media, Localoop anchors conversations to real-world locations – cafés, parks, universities, and neighborhoods.

#### Core Features:

Location discovery, real-time messaging, and hyperlocal community channels.  
Secure authentication via Google OAuth and email-based OTP verification.  
Admin dashboard for content moderation and community analytics.

#### Tech Stack:

Flutter | FastAPI | MongoDB | Docker | Google Cloud

#### Key Implementations:

- WebSocket infrastructure enabling real-time two-way communication.
- JWT-based security with refresh token management.
- Cloud-ready architecture with CI/CD pipelines for staging and production deployment.

#### Status:

Currently live in a closed beta with early testers providing feedback before Play Store release.

### Portfolio Website | [mrceo.netlify.app](https://mrceo.netlify.app)

Built a responsive personal portfolio showcasing projects and skills, featuring interactive games and API integrations.

Developed using HTML, CSS, JavaScript, and Tailwind CSS.  
GitHub: [github.com/mthoko-n/web-portfolio](https://github.com/mthoko-n/web-portfolio)

## ACHIEVEMENTS

---

#### FOUNDATIONAL C# WITH MICROSOFT

[Certificate Link\(Click here\)](#)

#### FNB APP ACADEMY 2025 CERTIFICATE

Certificate in full-stack development

#### CERTIFICATE OF MERIT UKZN

Top 3 in Java (COMP102)

#### CERTIFICATE OF MERIT UKZN

Top 3 in C++ (COMP315)