

EXPERIENCE

September 2025 Current	<div>Junior Software Engineer Pycentric</div> <div><ul style="list-style-type: none">• Collaborated in developing and deploying a cloud-based application on Amazon EC2, implementing CI/CD pipelines to build, test, and push Docker images with automated linting and containerized testing; deployed production services using Nginx as a web server, ensuring scalable, maintainable, and secure delivery.• Implemented monitoring and observability using CloudWatch and Grafana, tracking system performance, application metrics, and alerts to proactively detect and resolve issues.<div>Flutter, FastAPI, Python, MongoDB, Docker, CI/CD,AWS , Nginx, CloudWatch, Grafana, Loki,Promtail, Linters, Agile</div></div>
October 2024 September 2025	<div>Graduate Software Engineer Pycentric</div> <div><ul style="list-style-type: none">• Contributed to the development of full-stack features within a collaborative team, focusing on secure authentication, scalable APIs, and data-driven mobile integrations.• Delivered backend services using FastAPI and MongoDB, integrating seamlessly with Flutter-based client applications.• Engineered a FastAPI backend automating image-to-3D model conversion using PIFuHD and Blender, implementing texture-preserving GLB export and optimizing the workflow for upload efficiency and reliability.• Supported CI/CD workflows and DevOps operations through containerization, testing, and version control best practices.• Designed for scalability and future S3 integration, ensuring maintainable and secure code through peer reviews, documentation, and structured testing pipelines.<div>Flutter , FastAPI, Python, MongoDB, Docker, Unit Testing, S3 bucket, CI/CD, Agile, Grafana ,Swagger, Linux</div></div>
August 2023 December 2023	<div>Java Tutor University of KwaZulu-Natal</div> <div><ul style="list-style-type: none">• Java Tutor for the school of Computer Science and Information Technology</div>

EDUCATION

<div>University of KwaZulu-Natal</div> <div>Bsc Computer Science & IT</div> <div>Graduated 21 Dec 2023</div>	<div>High School</div> <div>Sunnydale Secondary School</div>
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SKILLS

<div>PROGRAMMING LANGUAGES Python, Dart, Java, C++, C#, Javascript, ASP.NET, HTML ,CSS</div> <div>PYTHON ECOSYSTEM FastAPI Streamlit, Typer/TyperCLI, Numpy, Pandas, threading, multiprocessing, Jupyter Notebook, Jupyterlab, Pytest, flake8, black</div> <div>DART Flutter</div> <div>VERSION CONTROL : Git , Github</div> <div>MONITORING Grafana, Loki, Promtail, Amazon CloudWatch</div> <div>DATABASES MongoDB, MySQL, Redis</div> <div>CLOUD / COMPUTE Amazon EC2, Google Compute Engine (GCE), Google Cloud Run</div> <div>INFRASTRUCTURE AS CODE : Cloud Formation, Terraform</div> <div>CONTAINERISATION Docker , Docker compose</div> <div>CI/CD GitHub Actions, Docker pipelines, Linters</div> <div>API DESIGN & INTEGRATION RESTful APIs, JSON, Swagger, Postman, curl</div> <div>TESTING : Unit Testing , Integration Testing</div> <div>OPERATING SYSTEMS/IDEs Debian/Ubuntu Distros, Linux, Mac OS, Windows , Android, Android Studio, VS Code, PyCharm,</div> <div>PRESENTATION/COMMUNICATION Jira, Confluence, Markdown , Office(Word , Excel , PowerPoint)</div>
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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](#)

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

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)