

EXPERIENCE

September 2025 Current	<div><b>Junior Software Engineer   Pycentric</b></div> <div><ul style="list-style-type: none"><li>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.</li><li>Implemented monitoring and observability using CloudWatch and Grafana, tracking system performance, application metrics, and alerts to proactively detect and resolve issues.</li></ul><div>Flutter, FastAPI, Python, MongoDB, Docker, CI/CD,AWS , Nginx, CloudWatch, Grafana, Loki,Promtail, Linters, Agile</div></div>
October 2024 September 2025	<div><b>Graduate Software Engineer   Pycentric</b></div> <div><ul style="list-style-type: none"><li>Contributed to the development of full-stack features within a collaborative team, focusing on secure authentication, scalable APIs, and data-driven mobile integrations.</li><li>Delivered backend services using FastAPI and MongoDB, integrating seamlessly with Flutter-based client applications.</li><li>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.</li><li>Supported CI/CD workflows and DevOps operations through containerization, testing, and version control best practices.</li><li>Designed for scalability and future S3 integration, ensuring maintainable and secure code through peer reviews, documentation, and structured testing pipelines.</li></ul><div>Flutter , FastAPI, Python, MongoDB, Docker, Unit Testing, S3 bucket, CI/CD, Agile, Grafana ,Swagger, Linux</div></div>
August 2023 December 2023	<div><b>Java Tutor   University of KwaZulu-Natal</b></div> <div><ul style="list-style-type: none"><li>Java Tutor for the school of Computer Science and Information Technology</li></ul></div>

EDUCATION

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

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

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### 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](https://github.com/mthoko-n/web-portfolio)

## ACHIEVEMENTS

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#### 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)