GUY MCKECHNIE

Industrial Software Engineer @ PAS-SA | Big Data & Telemetry | BSc IT @ NWU

mckechnieguy.mg@gmail.com +27 79 188 8014 Free State, South Africa LinkedIn
GitHub Instagram



EXPERIENCE

Industrial Software Engineer | PAS Automation Services

South Africa

May 2025 – Ongoing

- Architected "SciNapse," an enterprise API, and "Choco," a low-latency system diagnostics engine, to ingest and process high-frequency SCADA telemetry using advanced C# .NET, complex LINQ, and multi-inheritance.
- Engineered a highly sophisticated, dynamic React.js visualization engine, empowering stakeholders to translate raw industrial data into interactive drag-and-drop dashboards for real-time monitoring.
- Spearheaded "EyeLytix," a production-scale Big Data application for commodity trade analysis, executing advanced data modeling, reporting pipelines, and commercialization tokenization.
- Authored comprehensive technical documentation and software flow diagrams, engaging directly with clients to translate complex requirements into scalable technical architectures.

Developer & Founder | Booklidio

Jan 2022 – Ongoing Remote

- Engineered *booklidio-services*, a cloud-ready full-stack platform optimizing complex order processing, invoicing, inventory workflows, and operational analytics.
- Built "Lidio Stock," a React-Redux inventory manager featuring dynamic data tables, automated PDF invoice generation, and CSV exports.
- Implemented continuous CI/CD pipelines with GitHub Actions and containerized deployments using Docker Compose with secure non-root execution.

PROJECTS

Applying Statistical Foundations to Industrial Process Monitoring

Article

Feb 2026

- Authored a technical deep-dive on the collection, descriptive visualization, and inferential analysis of high-frequency, continuous real-time compressor telemetry.

Hospital Digitisation System

Cloud-Ready Management Platform

- Developed a Java-based platform to streamline patient workflows and analytics; prepared the server for Render/Railway with Dockerfiles, Redis, health checks, and graceful shutdowns.

MemberCountScraper & Automations

Python Automation

- Built a Python automation tool that scrapes live community data from 50,000+ members and triggers automated CI/CD deployments to GitHub Pages.

MY LIFE PHILOSOPHY

"My ambition is proudly sponsored by God and fueled by the billionaire-fire within."

SKILLS

Big Data Analysis · SCADA Systems · System Architecture · Real-Time Programming · Client Relations · Statistical Modeling

TECH STACK

C# · .NET Framework · TypeScript · React.js · Docker · CI/CD · GitHub Actions · PostgreSQL · Redis · Tailwind CSS · Python

EDUCATION

Bachelor of Science in Information Technology

North-West University

Jan 2026 – Dec 2028

NQF 5 in Software Development

Melsoft Academy

Jan 2025 – Dec 2025

NSC | A Aggregate (80%+)

Curro Vanderbijlpark

Jan 2020 – Dec 2024