

DON MICHAEL OMBISI

ombisimichael@gmail.com | +254 115 323 486 | [LinkedIn](#) | [GitHub](#) | [Web Portfolio](#)

PROFESSIONAL SUMMARY

Full Stack Developer with extensive experience building scalable applications, implementing cybersecurity solutions, and developing machine learning models. Skilled in secure software development, cloud infrastructure, data science, and financial analytics. Track record of delivering measurable performance improvements across fintech, government, and enterprise environments.

EDUCATION

Catholic University of Eastern Africa
Bachelor of Science in Computer Science

Nairobi, Kenya

PROFESSIONAL EXPERIENCE

AI & Analytics Engineer (Solutions & Operations)

April 2026 – Present

PARL | Nairobi, Kenya

- Execute license lifecycle management workflows for enterprise software solutions including IBM SPSS, Stata, and NVivo.
- Design and enhance renewal tracking systems with 'Days to Expiry' and status pipelines, improving client renewal visibility.
- Conduct targeted client outreach campaigns for Q2 license renewals, supporting revenue continuity and procurement processes.
- Maintain structured datasets for client engagement, renewal status, and follow-up workflows using Excel-based tracking systems.
- Contribute to the design of internal analytics pipelines, telemetry ingestion, and unified intelligence platforms.

Electronics Engineer Intern

January 2026 – May 2026

Spairally | Remote

- Engineer RF-based sensing modules leveraging Wi-Fi signal analysis for non-intrusive threat detection.
- Design and develop electronic systems supporting AI-driven concealed weapon detection platforms.

Financial Analytics & OpenBB Integrations Engineer (Contributor)

2025 – Present

OpenBB | Remote

- Deliver end-to-end OpenBB integrations for financial analysis as an open-source alternative to Bloomberg Terminal.
- Implement API-driven data ingestion, normalization, and visualization using Python, Pandas, and the OpenBB SDK.

FullStack Developer

November 2025 – April 2026

Safaridesk | Nairobi, Kenya

- Resolved critical bugs in the Notifications Engine/Module, restoring reliable delivery across user segments.
- Implemented secure coding practices to address vulnerabilities in the notification delivery system.

N8N & Backend Developer

October 2025 – November 2025

Power Values | Nairobi, Kenya

- Expanded n8n workflows to handle dynamic, subscription-aware form generation.
- Implemented OAuth 2.0 authentication and API rate limiting to prevent abuse.
- Applied input validation and output encoding to prevent XSS and injection attacks.
- Designed an approval UI using Next.js and built a modular chatbot interface with toggle functionality between AI coaches.

IT Administrator

April 2025 – July 2025

Kenyariri & Associates (Law Firm) | Nairobi, Kenya

- Implemented and configured POS systems to streamline transactions and boost operational efficiency.

- Established PCI-DSS compliant security measures for payment processing systems.
- Implemented end-to-end encryption for client-attorney privileged communications.
- Conducted regular security audits and compliance checks to maintain data confidentiality.

Data Science Intern

October 2024 – March 2025

Intel Indexer LLC | Remote

- Built a supervised ML model for stock prediction achieving 70% accuracy.
- Implemented data anonymization and secure data pipeline practices to protect sensitive financial information.
- Applied adversarial testing to ensure ML model robustness against data poisoning attacks.
- Developed LSTM models with TensorFlow for time series forecasting.
- Created interactive D3.js dashboards for financial insights with secure user authentication.

Systems Developer

April 2024 – September 2024

PostBank | Nairobi, Kenya

- Developed and optimized the Helpdesk Ticketing System, reducing resolution time by 40%.
- Implemented secure authentication mechanisms and session management to protect customer data.
- Applied OWASP Top 10 security best practices to mitigate common web vulnerabilities.
- Upgraded network infrastructure across 3 offices, boosting connectivity by 25%.
- Automated system backups with Python, reducing manual effort by 85%.
- Implemented encrypted backup storage and automated security patch deployment.

Android Developer

January 2024 – April 2024

FreeCopy Pvt. Ltd | Remote

- Migrated backend to Firebase, reducing latency by 35%.
- Configured Firebase security rules to enforce data access policies and prevent unauthorized access.
- Improved UI/UX for mobile apps, increasing user engagement by 28%.
- Delivered features on time in agile sprints with security code reviews integrated into CI/CD pipeline.

ICT Officer

April 2023 – October 2023

National Treasury | Nairobi, Kenya

- Developed a file management system that reduced document retrieval time.
- Implemented network security enhancements, decreasing vulnerability incidents.
- Deployed endpoint protection and network monitoring tools to detect anomalies in real-time.

Android & ML Developer

January 2023 – April 2023

Muito Incorporation | Remote

- Implemented facial detection and OCR algorithms with secure data handling protocols.
- Integrated input validation and sanitization to prevent injection attacks in ML model endpoints.
- Implemented secure API authentication using JWT tokens for user data protection.
- Collaborated on cross-platform development with a 6-person team.

KEY PROJECTS

- [Host3](#): Web3-based decentralized hosting platform built with React, Solidity, and IPFS achieving 99.8% uptime.
- [Aura3.0](#): Autonomous AI therapist powered by advanced NLP and emotional intelligence with privacy via blockchain.
- [Consult Parl](#): Autonomous deep research AI agent for consultants and analysts
- [Aqua-Horizon](#): Citizen science platform enabling communities to monitor, report, and discuss water quality issues.
- [Elastic Hashing Lossless Compression \(ELH\)](#): Research-driven C compression library applying elastic hashing concepts to LZ4-style compression with improved ratios on benchmark datasets.
- [Turbo-spork++](#): Minimal single-translation-unit C11 neural network library for building neural networks in plain C.
- [Lingua-Speak](#): Real-time language translation app built with Next.js and TensorFlow supporting 20+ languages.
- [AidRoute](#): AI-powered humanitarian logistics platform combining blockchain transparency with autonomous decision-making.
- [Drug-research](#): Drug discovery and protein-binding prediction tool using ML and NLP technology.

- [Virtual-machine-in-c](#): Stack-based virtual machine written in C for execution of custom bytecode.
- [Safariverse](#): Immersive 3D platform bridging cultures through African geography and community.

Quantitative Finance

- [Copula-Based Tail Risk](#): Pipeline for tail-risk modeling using Extreme Value Theory (EVT) and Copula methods.
- [MICPO-Portfolio-Optimization](#): Python project for portfolio optimization using MIQP relaxations with backtesting and scalability testing.
- [Black-Scholes-Finite-Difference-Solver](#): Finite difference methods for solving the Black-Scholes PDE for European and American options.
- [Adaptive-FEM-for-Multi-Asset-Options](#): Adaptive finite element methods for pricing multi-asset derivatives with advanced numerical techniques.

Quantum Computing

- [Grover's Algorithm](#): Comprehensive implementation of Grover's quantum search algorithm.
- [Hybrid-Quantum](#): Neural networks for learning on Noisy Intermediate-Scale Quantum (NISQ) devices.
- [Quantum Variational Eigensolver \(VQE\)](#): VQE algorithm for calculating molecular ground state energies.
- [Quantum Neural Networks](#): Variational quantum circuits for data classification tasks.

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, C++, SQL, Java, Golang, HTML, CSS.

FullStack: React.js, Next.js, HTML5, CSS3, D3.js, Figma, Node.js, Express.js, Firebase, REST APIs, GraphQL.

Data Science & ML: TensorFlow, PyTorch, scikit-learn, spaCy, Apache Spark, Hadoop, LSTM, NLP.

Cloud & DevOps: AWS, Google Cloud Platform, Microsoft Azure, Docker, Kubernetes, GitHub Actions, Jenkins, Linux.

Cybersecurity: Penetration Testing, Vulnerability Assessment, SSL/TLS, JWT, MFA, Firewall, IDS/IPS, DevSecOps.

Other: Quantum Computing, Blockchain, IPFS, WebSockets, PCI-DSS Compliance, n8n, Microsoft Office Suite.

CERTIFICATIONS

- [Ethical Hacker Certification – Cisco](#)
- [Certified Red Team Operations Management – Red Team Leaders](#)
- [Cyber Threat Management – Cisco](#)
- [Network Defense – Cisco](#)
- [Junior Cybersecurity Analyst – Cisco](#)
- [Networking Basics – Cisco](#)
- [Network Devices and Configurations – Cisco](#)
- [AI Solutions on Cisco Infrastructure Essentials \(DCAIE\) – Cisco](#)
- [Java – HackerRank](#)
- [Golang – HackerRank](#)
- [JavaScript – HackerRank](#)
- [SQL \(Advanced\) – HackerRank](#)
- [Frontend Developer – HackerRank](#)
- [Software Engineer – HackerRank](#)
- [Microsoft Office Specialist: Word, Excel, Database – ICDL Africa](#)
- [Applied Data Science Lab – WorldQuant University](#)
- [Quantum Computing: Basics of Quantum Information – IBM](#)
- [Quantum Machine Learning – IBM](#)
- [Quantum Business Foundations – IBM](#)
- [AI In Cybersecurity](#)

ACHIEVEMENTS

- **4th Place – AT4D Hackathon (Nivishe Foundation):** Advanced to the next cohort and secured USD 1,000 in funding. Contributed to solution design, technical execution, and presentation.