Manzi Prince Babou

SECURITY ENGINEER – CYBERSECURITY · DEVSECOPS · VOIP & TELEPHONY · SOFTWARE

Kigali, Rwanda, KG 1649A St · +250 799 616 273 · baboumanzi69@gmail.com · Portfolio · LinkedIn · GitHub

Cybersecurity-focused software engineer with hands-on experience in penetration testing, vulnerability assessment, and secure application development. Deepening enterprise-security foundations through the Google Cybersecurity Professional Certificate while shipping offensive-security work in production, including FortiCore, an AI-assisted penetration-testing platform. At Centrika I also run the telephony side of a live call-centre migration: Asterisk, SIP trunking over TLS, NAT traversal and RTP media troubleshooting. Full-stack fluency means I secure systems from both the builder's and the attacker's perspective.

EXPERIENCE

Security Engineer, Centrika Ltd, Kigali — APRIL 2026 – PRESENT

Enterprise digital solutions: TiCQet, Xentripay, SafariBus.

- Run vulnerability assessments across production systems; document findings in structured reports aligned with internal security standards.
- Analyze attack surfaces, replicate potential exploits, and hand engineering teams actionable remediation steps.
- Improved internal security monitoring and helped design SIEM-style dashboards for real-time visibility into production environments.

Call-centre & VoIP infrastructure

- Lead the telephony side of migrating Centrika's 2838 customer call centre from a legacy PRI/Asterisk setup to Zoho Voice (BYOC), routing inbound calls from an Asterisk 16 PBX over a TLS-secured SIP trunk.
- Configured Asterisk (chan_sip) SIP peers, TLS transport and certificates, and dialplan routing with caller-ID normalisation to E.164.
- Diagnosed SIP ALG header rewriting on plain UDP/TCP signalling and moved the trunk to TLS, restoring reliable call setup.

Junior Security Engineer, Africa Cyber Security Consortium — SEP 2025

- Strengthened security posture and improved existing security practices within an enterprise environment.
- Built Django and machine-learning tooling supporting security operations.

Cybersecurity Analyst (Virtual Experience), Mastercard, Forage — JAN 2025

- Served as an analyst on the Security Awareness Team; identified and reported phishing and other security threats.

- Assessed which business areas needed stronger security training and rolled out targeted courses and procedures.

PROJECTS

FortiCore, AI-assisted penetration testing & vulnerability assessment View

Rust-core security automation platform unifying reconnaissance, scanning, and safe exploit simulation. Detects and prioritizes vulnerabilities, then delivers actionable remediation guidance through an AI-assisted, flag-based CLI, cutting manual effort for security teams and ethical hackers. Rust, Linux CLI.

Halo, A parental controls & digital safety platform

Collaborating on a family digital-safety app: screen-time controls, app monitoring, location tracking, AI-powered insights, and remote device management. Expo, Java, Kotlin.

Plantiify, AI plant identification View

Identifies plant species from a single photo using machine learning, returning detailed species information.

More on GitHub.

SKILLS

1. **Security Vulnerability assessment:**
- SIEM monitoring · SOC analysis · Incident response · Mobile penetration testing · API testing · DevSecOps & CyberOps · Infrastructure hardening · RBAC · Security compliance
2. **VoIP & telephony:**
- Asterisk (chan_sip, dialplan) · SIP / SDP / RTP · SIP trunking & BYOC · TLS signalling · NAT traversal · Zoho Voice · Wireshark · tcpdump
3. **Backend:**
- Node.js (Express) · Spring Boot · Django · Rust
4. **Soft skills:**
- Communication · Teamwork · Critical thinking · Problem-solving

CERTIFICATIONS

Google Cybersecurity Professional Certificate – Coursera. NIST CSF, CISSP domains, risk management, incident response, SIEM operations, Linux hardening, network security.

Cyberium Cybersecurity Certificate – ThinkCyber, Israel. Threat identification, secure behavior, risk prevention.

picoCTF – Carnegie Mellon University. Cryptography, web exploitation, forensics, reverse engineering.

National Cyberlympics – NCSA. Web and blockchain exploitation, forensics, reverse engineering.

Ideation & Prototyping Workshop – CODE University. Design thinking, rapid prototyping, iterative product development.

EDUCATION

Rwanda Coding Academy, Nyabihu, High School Certificate & Diploma 2023 – 2026

Specialized in software development and embedded systems; led several innovation projects.

Groupe Scolaire Officiel de Butare, Huye, O-Level Certificate 2020 – 2023

Excelled in sciences and mathematics.

LEADERSHIP & COMMUNITY

CyberKnights Cybersecurity Club – Mentor & Member Affairs Director

Mentor students in cybersecurity fundamentals, CTF preparation, web security, and digital forensics while running member engagement and club activities.

iLead Rwanda Leadership Excellence Program – Maxwell Leadership Foundation

Leadership training in ethical leadership, team building, communication, and conflict resolution, applied through CyberKnights mentoring.

LANGUAGES

English (fluent)

Kinyarwanda (native)

French (conversational)

Spanish (basic)

REFERENCES

Gad Agaba – CTO & Product Lead, Centrika Ltd · gagaba@centrika.rw · +256 772 212 414

Yves Hakizimana – Cybersecurity Lead, Centrika Ltd · yhakizimana@centrika.rw · +250 795 914 221

Celestin Nzeyimana – Instructor, Rwanda Coding Academy · cnzeyimana@rca.ac.rw · +250 784 820 570