OLUWASEYI PAUL BABALOLA

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LinkedIn | **GitHub**

Authorized to work in the U.S. (Green Card Holder)

SUMMARY

Infrastructure and Systems Engineer with 10+ years of experience designing, securing, and optimizing enterprise IT environments and full-stack applications. Expert in cloud (AWS, Azure), networking (Cisco, VPN), and database administration (SQL Server, Oracle). Proven ability to enhance platform reliability, automate processes with Python and PowerShell, and lead projects from concept to deployment. Combines deep technical expertise with a Ph.D. in Electronic Engineering and a record of publishing and mentoring in advanced IT fields.

TECHNICAL SKILLS

- Programming & Scripting: Python, JavaScript, React, Node.js, PowerShell, Bash, HTML, CSS
- Cloud & Virtualization: AWS, Microsoft Azure, VMware, Hyper-V
- Databases: Microsoft SQL Server, Oracle, MySQL
- Networking: Cisco Routers/Switches, LAN/WAN, VPN (IPsec, SSL), Firewalls, DNS, DHCP, VLAN
- Systems & Tools: Windows Server, Linux (Ubuntu, CentOS), Active Directory, Git, Jira, Confluence, ServiceNow, Nagios, SolarWinds
- Methodologies: ITIL, Disaster Recovery, Automation, Incident Response, Cybersecurity

PROFESSIONAL EXPERIENCE

Infrastructure and Software Application Support Engineer
SOFTCOM Solutions SA (Pty) Ltd | Stellenbosch, South Africa
03/2018 – 10/2018

- Designed and built components for a customer-facing React and Python web application, delivering data insights to end-users.
- Developed and supported a RESTful API integrated directly with customer systems, enhancing platform connectivity.
- Created internal Python automation tools for quality control and workflows, improving operational efficiency by 25%.
- Migrated and managed Azure server backups and Active Directory environments, increasing system uptime by 25%.
- Deployed secure remote access solutions (IPsec VPN, SSL VPN) and resolved complex TCP/IP, DNS, and DHCP issues, cutting incident response time by 30%

Systems and Network Engineer
DPoint Information Technologies | Ibadan, Nigeria
02/2012 – 11/2016

- Optimized LAN/WAN architectures, improving network throughput by 40% for enterprise users.
- Configured and maintained Cisco routers, switches, and firewalls, ensuring 99.9% network uptime.
- Deployed site-to-site and remote access VPNs and conducted security audits, reducing system vulnerabilities by 35%.
- Led disaster recovery initiatives and documented configurations per ITIL best practices

Database and Network Administrator
Verde Information Technologies | Abuja, Nigeria
01/2011 – 01/2012

- Designed and administered secure enterprise network and Microsoft SQL Server databases, ensuring 99.9% uptime.
- Implemented automated backup and disaster recovery strategies, achieving 100% data restoration success.
- Managed firewalls, antivirus, and Intrusion Detection Systems (IDS), strengthening cybersecurity posture.

- Monitored network performance and bandwidth utilization, proactively resolving issues to maintain service availability.

Lecturer and Senior R&D Engineer
Cape Peninsula University of Technology (CPUT) | Cape Town, South Africa
07/2020 – 12/2025
- Applied Python, MATLAB, and machine learning to model systems and optimize infrastructure for R&D projects.
- Led research in digital signal processing and networked systems; published 30+ articles in IEEE, IET, and Elsevier journals.
- Supervised 4 DEng and 1 MEng students in AI/ML and signal processing research

Lecturer
Eduvos Pty Ltd, South Africa | Cape Town, South Africa | Oct 2024 – Dec 2025
- Developed and delivered 6 IT courses including Machine Learning, Cyber Security, and Python Programming
- Implemented project-based learning improving student performance by 25% on practical assessments
- Managed academic delivery for 30+ students per semester across multiple campuses

PROJECTS
- **AI-Driven Intrusion Detection for HD Video Surveillance** | Python, Computer Vision, Deep Learning, OpenCV | *GitHub:* [AI-Driven Intrusion Detection for HD Video Surveillance](#)
- **Web Application Network Intrusion Detection System (NIDS)** | Python, Machine Learning, Scikit-learn, React, Node.js | *GitHub:* [Web Application Network Intrusion Detection System (NIDS)](#)
- **EPTA Digital Communication Decoder** | Python, Data Parsing, Wireless Communications Data, Protocol Decoding | *GitHub:* [EPTA Decoder](#)
- **HMM-DMD WiFi Localization Algorithm** | Python, Machine Learning, Signal Processing, HMM, DMD | *GitHub:* [HMM-DMD WiFi Localization Algorithm](#)

EDUCATION
- Ph.D., Electronic Engineering | Stellenbosch University, South Africa | 2020
- Masters of Science, Electrical Engineering | University of the Witwatersrand, South Africa | 2017
- Bachelor of Science, Mathematics | University of Ibadan, Nigeria | 2009

CERTIFICATIONS
- Cisco Certified Network Associate (CCNA) | Cisco | 2010 – 2023
- Oracle Database 10g Administrator Certified Professional (OCP) | Oracle | 2010 – Present
- Cybersecurity Certificate | 2024 – Present

REFERENCES
Available upon request