

# OLUWASEYI PAUL BABALOLA

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[LinkedIn](#) | [Project Portfolio](#)

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

### SUMMARY

Infrastructure and Cybersecurity Engineer with 10+ years of experience securing and operating enterprise network and cloud environments across on-prem and cloud platforms. Specialized in Palo Alto firewalls, VPNs, SASE, Zero-Trust architectures, and incident response, with hands-on experience in AWS and Azure. Proven track record of improving security posture, automating operational workflows, and supporting mission critical systems in production environments.

### CORE TECHNICAL SKILLS

#### Security & Network Engineering (Primary Focus)

Palo Alto Networks (PAN-OS, Strata Cloud Manager), SASE, Zero-Trust Security Architecture, IDS/IPS, DLP, Firewall Policy Design and Management, VPN Technologies (IPsec, SSL), Incident Response, Threat Hunting, Security Audits, Network Hardening, Risk Mitigation

#### Cloud & Infrastructure

Amazon Web Services (AWS), Microsoft Azure, VMware, Hyper-V, Windows Server, Linux, Active Directory, DNS, DHCP, LAN/WAN Architecture, VLANs, Enterprise-Scale Networking

#### Automation & Scripting

Python, PowerShell, Bash, Security Workflow Automation, Infrastructure Automation, Operational Scripting

#### Monitoring, ITSM & Operations

SolarWinds, Nagios, ServiceNow, System and Network Monitoring, Disaster Recovery Planning, ITIL-Aligned Operations

#### Applied Research & Machine Learning (Supporting Skillset)

Applied machine learning and signal-analysis techniques for anomaly detection, pattern recognition, and system optimization in networking and security contexts

### PROFESSIONAL EXPERIENCE

#### Infrastructure and Software Application Support Engineer

**SOFTCOM Solutions SA (Pty) Ltd | Stellenbosch, South Africa**

*Mar 2018 – Oct 2018*

- Designed, deployed, and supported secure enterprise network and application environments, including VPNs (IPsec, SSL) and firewall-controlled access.
- Implemented Python-based automation tools to streamline security workflows and operational checks, improving efficiency by 25%.
- Managed and secured Azure-based infrastructure and databases, ensuring data integrity, availability, and compliance.
- Supported incident response and troubleshooting across TCP/IP, DNS, and DHCP layers, reducing resolution time by 30%.
- Integrated RESTful APIs with customer systems to enable secure real-time data exchange and analytics.
- Provided Tier 2/3 support for complex network and infrastructure issues.

#### Systems and Network Engineer

**DPoint Information Technologies | Ibadan, Nigeria**

*Feb 2012 – Nov 2016*

- Designed and optimized LAN/WAN architectures supporting enterprise workloads, improving throughput by 40%.
- Configured and maintained Cisco-based networking infrastructure, achieving 99.9% uptime.
- Deployed site-to-site and remote access VPNs and conducted network security audits, reducing vulnerabilities by 35%.
- Led disaster recovery and business continuity planning aligned with ITIL best practices.

## **Database and Network Administrator**

**Verde Information Technologies | Abuja, Nigeria**

*Jan 2011 – Jan 2012*

- Administered enterprise databases and network infrastructure, ensuring high availability and secure access.
- Implemented automated backup and disaster recovery strategies, achieving 100% recovery success.
- Managed firewalls, IDS, and endpoint security tools, strengthening organizational security posture.
- Monitored network performance and proactively resolved issues to maintain service reliability.

## **ACADEMIC EXPERIENCE**

### **Lecturer and Researcher**

**Multiple Institutions | Cape Town, South Africa**

*2017 – Present*

- Delivered university-level courses in Cybersecurity, Machine Learning, Python Programming, Engineering for Space Environment, and Engineering Mathematics.
- Supervised postgraduate research and mentored students in applied AI, signal processing, and secure systems.
- Conducted applied research in digital signal processing, wireless systems, and anomaly detection, with 30+ peer-reviewed publications.
- Designed project-based curricula emphasizing real-world systems, automation, and applied security concepts.

## **CERTIFICATIONS**

- Cisco Certified Network Associate (CCNA)
- Oracle Database 10g Administrator Certified Professional (OCP)
- Cybersecurity Certificate

## **PROJECTS**

**AI-Driven Intrusion Detection System | [GitHub](#)**

- Designed and implemented an intrusion detection system using Python and machine learning to identify anomalous behavior in network traffic and video surveillance data.
- Improved threat detection accuracy while reducing false positives through feature engineering and model optimization.

**Web Application Network Intrusion Detection System (NIDS) | [GitHub](#)**

- Built a network intrusion detection platform integrating Python-based analytics with a web interface for real-time monitoring.
- Enabled detection and visualization of suspicious traffic patterns to support security operations and incident response.

## **EDUCATION**

**Doctor of Philosophy (Ph.D.) in Electronic Engineering**

*Stellenbosch University | Stellenbosch, South Africa*

**Master of Science (M.Sc.) in Electrical Engineering**

*University of the Witwatersrand | Johannesburg, South Africa*

**Bachelor of Science (B.Sc.) in Mathematics**

*University of Ibadan | Ibadan, Nigeria*