CAIO B. FRANCA

Network Security Engineer | braga.caio@outlook.com | Linkedin | Github

Professional Summary

Cybersecurity and Network Engineer with 10+ years of experience supporting large-scale, multi-vendor infrastructures across enterprise and hyperscale data center environments. Currently part of a global team supporting Meta's backbone, specializing in secure network operations, incident management, and the reliability of production fabric networks. Skilled in monitoring, troubleshooting, and hardening network environments using Cisco, Juniper, and other multi-vendor technologies. Bringing a strong cybersecurity foundation developed through hands-on experience with SIEM platforms, threat detection, incident response, and malware analysis. Certified in CompTIA Security+ and the Google Cybersecurity Professional Certificate, with growing knowledge in Python and Ansible / Terraform to support security automation and streamlined operational workflows. Highly motivated to advance into a dedicated Network Security role, contributing to secure architectures, vulnerability identification, operational resilience, and continuous improvement within hyperscale network environments.

Work Experience

Network Operations Engineer - Astreya (allocated at Meta, Dublin, IRL) May 2025 — Present

• Operate and troubleshoot large-scale, multi-vendor enterprise and data center networks, ensuring reliability, scalability, and high availability across Meta's global infrastructure.
• Partner cross-functionally with network operations, deployment, and engineering teams across regions to support backbone and fabric network operations.
• Perform end-to-end fault isolation, incident response, and resolution across physical and logical network layers, contributing to SLA adherence and service continuity.
• Detects and diagnoses diverse network and devices errors and failure conditions across multi-vendor and optical domains, collaborating with smart hands teams to resolve complex incidents.
• Manage and prioritize incidents through monitoring platforms and ticketing systems, maintaining clear stakeholder communication and timely escalation of critical events.
• Maintain accurate incident documentation, root cause analysis, and resolution logs aligned with operational standards.
• Contribute to the continuous improvement of MOPs and SOPs to promote consistency, efficiency, and risk reduction.
• Follow vendor RMA processes and maintain documentation of network changes (VLANs, DNS, subnets).
• Support development of monitoring dashboards, alerts, and metrics to improve network observability and operational responsiveness.
• Collaborate with automation teams to identify opportunities for process improvement and assist

in developing basic Python scripts to streamline operational workflows.

IT Deployment Operations & Asset Management Associate - PwC Ireland

June 2022 — May 2025

• Executed secure rollouts of hardware, software, and peripherals across user endpoints, ensuring compliance with imaging, encryption, and software deployment standards.

• Assisted in IT asset lifecycle management and documentation to support inventory accuracy and audit traceability.

• Troubleshoot application/system issues and escalated complex cases, contributing to business continuity and security enforcement.

IT Support Engineer - PFH (Clients: PwC, Irish Rail, Dublin Bus), Ireland

November 2021 — June 2022

• Provided end-user and network support across diverse enterprise environments, managing access controls, VPN connectivity, and endpoint troubleshooting.

• Supported ticket escalations and coordinated with internal teams to resolve critical infrastructure and service desk issues.

Network Operations Centre (NOC) Engineer - RTM Rede de Telecomunicações para o Mercado, Brazil.

April 2012 — April 2019

• Provided L1/L2 support across a nationwide MPLS backbone, maintaining over 1800 routers and switches in a multi-vendor environment (Cisco, Juniper).

• Supported dynamic routing protocols (OSPF, BGP), switching technologies (VLANs, STP, EtherChannel), and monitoring systems (SolarWinds, SNMP, NetFlow).

• Responded to connectivity, configuration, and service degradation issues within regulated SLA windows.

• Contributed to incident resolution, configuration changes, and telecom deployments including physical installation and validation.

• Maintained strict change control and documentation aligned with the Central Bank of Brazil's financial compliance standards.

• Collaborated with ISPs and vendors to coordinate resolution of high-impact network outages and service escalations.

Key Skills

Enterprise Networking & Infrastructure

• Core Protocols: TCP/IP, BGP, OSPF, MPLS, VLANs, STP, EtherChannel, DNS, DHCP

• Hardware & Platforms: Cisco (IOS/NX-OS), Juniper, Palo Alto, Fortinet, Check Point, load balancers

• Network Design Support: High-availability and redundancy planning, route optimization, subnetting, segmentation

• Monitoring & Diagnostics: SolarWinds, Splunk, Wireshark, NetFlow, SNMP, tcpdump

• Infrastructure Operations: Logical/physical provisioning, VLAN/IP planning, DNS updates, RMA coordination

Automation & Network Management

• Tools: ServiceNow, Remedy, internal Meta systems for incident and change management

• Scripting Exposure: Python (task automation, log parsing, inventory updates), basic REST API integration

• Collaboration: Partnering with automation teams to improve workflows, monitoring dashboards, and operational responsiveness

Security & Governance

• Technologies: Firewalls, VPNs, ACLs, IDS/IPS, DDoS mitigation, zero-trust fundamentals

• Frameworks & Compliance: Familiar with GDPR, ISO 27001, and access-control/encryption models (TLS, PKI)

• Incident Handling: Log analysis, vulnerability identification, SIEM interpretation (Splunk, Google tools), coordinated response

Architectural & Strategic Contributions

• Design Collaboration: Support network architects and deployment teams on scaling and infrastructure design

• Process Optimization: Contribute to SOP/MOP development, documentation standards, and escalation playbooks

• Cross-Functional Engagement: Collaborate with global teams for fault analysis, deployment planning, and vendor escalations

Certifications & Education

• **Postgraduate Certificate in Cybersecurity Management** – MTU Ireland - current

• **Higher Diploma in Science in Computing** – CCT College, Dublin - 2020 – 2021

• **CompTIA Security+ (SY0-601)** - Valid: August 2026

• **Google Cybersecurity Professional Certificate** - Completed: October 2024

• **CCNA Routing & Switching 200-120** – INFNET (Course) - March 2018 – Sept 2018

Portfolio & Projects

Explore my portfolio: Network and Security projects: https://caiofrnca.github.io/

Interests

• Kart racing, hiking, and travel vlogging (CapCut editing for YouTube)

• Virtual lab environments for NetOps experiments

• Technical documentation creation for complex networking processes

• Leadership and agile methodologies to support team development

References

Available upon request