Jacob Dufossé — Junior Cybersecurity Engineer

Network Automation & Security

jacob@jacobdufosse.dev | +262 692 60 14 33 | <u>Portfolio</u> | <u>GitLab</u> | <u>Linkedin</u> Saint-Paul, Réunion (France) | Open to relocation for the right opportunity or to work across time zones

Professional Summary

Junior cybersecurity engineer with **over a year of hands-on experience** in network security at Orange Réunion, after **12+ years working in international** creative technology roles (Montreal, Australia, France). **Trained by Orange CyberDefense** on Palo Alto NGFW, Panorama, and IPS/IDS. Strong background in **Python automation** for **threat detection** and operational workflows. Early adopter of **Al-assisted development** in cybersecurity. → Currently pursuing a Master's degree in Network & Security (2025–2027), with a fully remote schedule. Open to part-time or apprenticeship opportunities (2 weeks work / 2 weeks study) aligned with the program.

Education

- Master's in Network & Security (2025-2027) | University of Reims, France
- Bachelor in Network & Telecommunications Cybersecurity Track (2023-2025)

University of La Réunion, France | Graduated Top of Class | ANSSI SecNumEdu certified

- Bachelor of Arts in Design and Visual Experience (2006-2009) | Université du Québec à Montréal, Canada
- Associate Degree in Electrical Engineering & Industrial Computing (2000-2002) | IUT Paul Sabatier, France

Experience

Junior Network & Security Engineer | Orange Réunion | Sep 2024 - Present

Trained by Orange CyberDefense

- Production Infrastructure: Administered Palo Alto firewalls (PAN-OS, Panorama), managed SSL/TLS
 certificates, Responded to Level 2 incidents and performed advanced network troubleshooting,
 Documented configurations and operational procedures
- **Security Operations:** Deployed and fine-tuned IPS/IDS modules (Palo Alto), performed DoS protection tuning, Built Python tools for dynamic threat intelligence (EDL, IOC ingestion, IP blocking/exclusion), Analyzed firewall and system logs for threat detection and response (Loki, Grafana, Centreon)
- Network Operations: Managed multi-vendor infrastructure (Cisco, Juniper, Fortinet, F5 load balancers), Handled network flows, ACLs and change management, Contributed to documentation and compliance best practices

Cybersecurity Intern - Governance & Penetration Testing | SOOBIK Solutions | Apr - Jul 2024

- Conducted internal audit and led documentation for French "ExpertCyber" certification (aligned with ISO 27001, NIST, PASSI standards)
- Performed basic web application pentesting (OWASP Top 10, Burp Suite, Kali Linux)

SEO and Web Performance consultant | Freelance | 2020 - 2023

- Automated business workflows and improved site performance (SEO, Core Web Vitals)
- Analyzed data and advised SMBs using Google Analytics, SEMrush, and Google Search Console

Immersive Media Consultant | Freelance (France & Canada) — 2009–2017

Creative coding (nodal environments, Python, Arduino), interactive prototyping, technical direction

Skills

<u>Professional Experience (Production Environment)</u>

Firewalls: Palo Alto Networks (NGFW, Panorama, ATP), Fortinet • **Network security:** routing, VLANs, BGP, certificate management • **Security Monitoring:** Palo Alto IPS/IDS, Centreon, threat intelligence APIs •

Languages: Python automation & API integration, Bash scripting • **AI:** AI-assisted software development • **NetOps:** GitLab, version control, audit trails • **Protocols:** TCP/IP, SSL/TLS

Academic & Lab Experience

SIEM: Wazuh • IPS/IDS: CrowdSec, Snort • Incident Management: thehive and cortex (basic operational experience) • SOAR: N8N • Virtualization: VMware ESXi, vSphere • Operating Systems: Linux (advanced) • Database: SQL, PostgreSQL • Firewall: OPNsense, Stormshield (basic operational experience), Cisco Meraki (introductory)

Currently Learning (2025)

GitOps: Advanced CI/CD pipelines, containerization • **Infrastructure as Code:** Terraform, Ansible automation • **Cloud Security:** AWS/GCP security frameworks and best practices

Familiar with (Theoretical Knowledge)

EBIOS Risk Management • ISO 27001 Security Governance & PASSI Compliance (academic training)

Soft Skills

Analytical thinking, collaboration, self-learning, clear documentation

Projects

Googlebots Automation & Dynamic Threat Exclusion (Production) | Orange Réunion - 2025

- Eliminated manual firewall security rules maintenance (1-2 hours/week → 0)
- Automated IP whitelisting with Python, Palo Alto EDL, GitLab CI, and secure VM infrastructure
- Planned secure VM infrastructure
- · Al-assisted development with version control and audit trails

Python Threat Intelligence Tool (Production) | Orange Réunion - 2025

- Reduced threat analysis time from hours to <10 minutes per cycle
- Multi-algorithm threat detection, attacker scoring, automated IP blocklists generation, forensic reports
- Processes 1000+ IPs per analysis with comprehensive intelligence

Palo Alto NGFW Advanced IPS/IDS Deployment (Production) | Orange Réunion - 2024

- 40% reduction in medium-severity international threats
- SSL/TLS decryption, CVE monitoring, DoS protection, Panorama centralized management

Open Source SOC Infrastructure (Academic) | IUT La Réunion - 2024

- Enterprise-grade SOC capabilities at zero licensing cost
- Wazuh SIEM, Zabbix, CrowdSec, OPNsense, Grafana

Detailed projects available at: jacobdufosse.dev

Certifications

- Rice University Python Programming (2024)
- Google IT Security & Infrastructure (2023)
- ANSSI Cybersecurity MOOC (SecNumAcademy) (2023)
- SQL/PostgreSQL Database Management (2023)

Additional Information

Languages: French (Native), English Fluent (C2 Professional proficiency - 12+ years international experience)

Mobility: Proven international mobility (Australia, Canada) | Open to international, remote, or hybrid roles

Interests: Emerging technologies (quantum computing, AI, cybersecurity), global affairs, yoga instruction (10+ years), Brazilian Jiu-Jitsu