Pixel Peeper

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Professional Summary

IT Architecture student with a security-first approach to DevSecOps and resilient infrastructure. Proficient in virtualization, system hardening, and automation, with hands-on experience in penetration testing and secure embedded systems programming.

Experience

President — *Leet-Makers Robotics Club, UM6P-1337*   *Nov 2022 – Present*

- Designed and supervised club operations, including curriculum development and external partnerships, while leading secure embedded development workshops for more than 150 participants.

Technical Member & CTF Developer — *Elitesec Club, UM6P-1337*   *May 2023 – Present*

- Architected diverse CTF challenges (hardware, OSINT, Crypto) and organized competitive events, managing infrastructure, and boosting member engagement.
- Delivered technical workshops on hardware hacking and OPSEC; implemented security-as-code (SecDevOps) practices to fortify project security and collaboration.

Key Projects

- **Homelab & Self-Hosted Infrastructure:** Architected a secure, multi-service home lab using Proxmox for virtualization and TrueNAS for resilient ZFS storage. We implemented a custom BeagleBone-based OpenBSD firewall for network security and maintain key services, including Pi-hole (DNS filtering), Plex (media streaming) and Syncthing (decentralized file sync).
- **ft_transcendence — DevSecOps & Web App:** Built a real-time multiplayer Web App (Django / JS) fortified by a comprehensive DevSecOps pipeline featuring an ELK stack, Prometheus/Grafana monitoring, HashiCorp Vault, and a WAF.
- **Inception — Secure LEMP stack:** Deployed a high-performance WordPress stack using Docker, featuring Nginx with SSL/TLS encryption, MariaDB, PHP-FPM, a Redis cache for accelerated performance and a dedicated FTP server for file management.
- **Born2beRoot — Linux Hardening:** Executed a multilayered security hardening of a Debian server, configuring secure SSH, robust firewall policies (UFW), AppArmor policies, LVM encryption, automating monitoring scripts with cron, and deploying a full WordPress site using lighttpd.
- **Robotics & Embedded Security:** Designed and secured embedded systems from hardware (KiCad PCB design) to firmware (C/C++) implementing resilient I2C/SPI communication protocols.

Technical Skills

- **Infrastructure & Cloud:** AWS, Terraform, Ansible, Linux Admin, Nginx
- **DevSecOps & Containers:** Docker, Kubernetes, Jenkins, CI/CD, SIEM, WAF, Security as Code
- **Programming & Data:** C/C++, Zig, Bash, SQL (PostgreSQL, MariaDB)
- **Security & Monitoring:** PenTesting, OWASP, CVE Analysis, Prometheus, Grafana, ELK Stack
- **Embedded & Industrial Control:** PLC Programming, SCADA/HMI, KiCad, SBC, CAN Bus, UART/I2C/SPI.

Education

Diploma in IT Architecture — *UM6P-1337 School, Ben Guerir, Morocco*   *Expected 2026*
Focus: Linux Administration, Networking, Automation, Cloud Computing

Certifications & Training

- **Offensive Security Skills Validation:** Completed over 20 advanced penetration testing modules and CTFs on platforms including Hack The Box and TryHackMe.
- **Cloud Security Competition:** Demonstrated practical skills as a participant in the Global 42 AWS Cloud Quest Tournament.

Additional Information

Languages: English (Fluent), Arabic (Native).
Interests: Zero-Knowledge proofs, exploring novel cryptographic methods, embedded system security, OSINT, hardware hacking, open source hardware.