PROFESSIONAL AND EDUCATIONAL PORTFOLIO — 2026–2027 EDITION

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Supporting the digital and industrial transformation of Central African businesses through hands-on upskilling, cybersecurity, and technological sovereignty.

Starting **February 1, 2027**, I will take office as **Head of Continuing and Professional Education** and **Cybersecurity Lecturer** at **Institut UCAC-ICAM in Douala**. Backed by over **20 years of experience** across France and Central Africa, I combine hands-on technical leadership (IT Manager, DPO, infrastructure consultant) with deep expertise in instructional design.

Local presence and regional reach: based in Douala (Yansoki campus), operating throughout Cameroon and the wider CEMAC sub-region.

20+ yrs	1,300+	17	37
in IT, cyber, and training	learners mentored	qualifying programs delivered	SME and corporate clients

01 Three Core Pillars

Serving companies, public institutions, and future engineers across the CEMAC region

Instructional Design and Knowledge Transfer

Designing certifying and custom training tracks (in-house and inter-company), deploying e-learning ecosystems (LMS/Cyberlab), and championing practical learning.

Cybersecurity and Operational Resilience

Executive awareness, hands-on training in infrastructure defense, regulatory compliance (GDPR/NIS2), and business continuity / disaster recovery planning (BCP/DRP).

Sovereignty and Digital Innovation

Integrating controlled open-source platforms (Linux/Debian, Nextcloud) and local AI tools to strengthen organizational technological independence.

02 Focus Areas and Continuing Education

Tailored Training Engineering

Skills-gap analysis for businesses and institutions, design of qualifying programs (in-house or inter-company), and leadership of the continuing education portfolio at UCAC-ICAM.

Cybersecurity and IT Resilience

Practical training in security auditing, infrastructure defense, crisis management (BCP/DRP), and data protection for IT teams and decision-makers.

E-Learning Systems and Cyberlabs

Deployment of hybrid learning environments (Moodle LMS, sovereign documentation hubs, isolated Docker virtual labs) built around learning by doing.

Higher Education and Mentoring

Teaching future engineers at Institut UCAC-ICAM in cybersecurity, cryptography, and sovereign system administration.

03 Areas of Expertise

Dual field-tested technical expertise and instructional engineering for executives and technical teams

Instructional Design

- **High-level communication:** translating complex architectures and cyber risks for executive boards or upskilling technical teams.
- **E-Learning engineering:** designing complete curricula, deploying Moodle ecosystems, and leading virtual classrooms.
- **Mentoring:** individualized technical coaching with 1,300+ learners supported and 17 qualifying training programs delivered.

Cybersecurity and Resilience

- **Resilience and defense:** security audits, design and testing of NIS2-aligned business continuity and disaster recovery plans (BCP/DRP).
- **Compliance:** GDPR expertise (DPO) and end-to-end legal and technical data protection.
- **Infrastructure:** access hardening, server hardening, and proactive threat monitoring (EBIOS RM methodology).

Governance and Sovereignty

- **IT leadership:** technical direction and management of complex information systems (multi-site environments, local authorities).
- **Sovereignty:** open-source deployments (Debian/Linux, Nextcloud, local AI) ensuring long-term technological autonomy.
- **Management and Agile:** steering complex digital projects, leading technical teams, and managing on-site operations.

04 Technologies and Tools

Technical stack spanning instructional design, systems, offensive/defensive cybersecurity, governance, and local AI

Instructional Design and CMS

LMS Moodle · DokuWiki · WordPress · PrestaShop

Systems and Virtualization

Debian / Linux Mint · Kali Linux · Windows Server · Windows 10/11 · Proxmox · Docker / Kubernetes · Webmin / CRON

Networking and Defensive Security

pfSense · UFW (Firewall) · IDS / IPS · Suricata / Snort · Fail2Ban · PSAD · ClamAV

Auditing and Offensive Security

Nmap · Nuclei · Gobuster · SQLMap · Burp Suite · Metasploit · Nessus / OpenVAS · Wireshark · Maltego (OSINT) · TheHarvester

Monitoring and SecOps

Wazuh (SIEM/XDR) · Zabbix · Nagios · Active Directory · TSE / RDP

Governance and Compliance (DPO)

EBIOS RM · GDPR / DPIA · NIS2 / ISO 27001 · Processing Register · Madis

Artificial Intelligence and Data

Ollama (Local) · Gemini API / LLM · RAG · Prompt Engineering · OpenWebUI · Hugging Face · CUDA

Web Development and Databases

VS Code · Python (Flask/FastAPI) · PHP · HTML5 / CSS3 / SCSS · JS (Vis.js/Chart.js) · SQL / Merise · GitHub

Productivity and Creative Tools

Nextcloud · Tor / OnionHop · Google Workspace · LibreOffice · Microsoft 365 · GIMP · Blender

05 Educational Demonstrators and Achievements

10 platforms, open-source tools, and sovereign architectures built for higher education, auditing, and resilience

01. Bozoc EduHub: Offline-First Hybrid Learning Platform (UCAC-ICAM)

Python | FastAPI | NiceGUI | SQLite | PHP / MySQL | WebSocket | mDNS

Active engineering education (**PROSIT** — Problem- and Project-Based Learning) demands reliable collaborative digital tools. The goal was to guarantee complete educational continuity for the **INFO471 (Cybersecurity and Cryptography)** course at Institut UCAC-ICAM, even during Internet outages or in projectorless classrooms.

The Solution

Design and development of **Bozoc EduHub**, an **Offline-First and Tri-Mode (Cloud / LAN / Offline)** hybrid learning platform uniting an Instructor portal, a collaborative Student workspace, a LAN virtual projector, and 4 built-in interactive cybersecurity labs.

Key Features and Instructional Design

- **Resilient Tri-Mode Architecture:** bidirectional Cloud sync (PHP/MySQL REST API), automatic classroom LAN discovery (mDNS/Zeroconf), and full Offline persistence (SQLite + local documentation cache).
- **PROSIT Orchestration:** modules, sequences (PROSIT Outbound/Return, CER, Labs), cohorts, teams, role rotation, progressive locking, competency grading, and exports (PDF, CSV, JSON, ZIP).
- **Virtual Projector:** live WebSocket/MJPEG streaming of the instructor's screen, presentation mode, or shared terminal directly to student browsers over the LAN.
- **Interactive Labs and Mini-CTF:** Crypto Lab, SIEM/IDS Lab (Suricata/Wazuh), Vuln Sim Lab, and Mini-CTF with real-time scoreboard; anti-tampering HMAC-SHA256 signatures on PDF deliverables.

Tech Stack: Python 3.12, FastAPI, Uvicorn, NiceGUI, SQLAlchemy, SQLite, PHP/MySQL, mDNS/Zeroconf, WebSockets, ReportLab, cryptography (HMAC-SHA256), bcrypt.

View User Manual (PDF, French)

02. "Vibe Coding": Cyberlab Creation and Deployment

Docker | Antigravity | HTML / CSS | GitHub

Training against cyber threats requires intensive hands-on practice without exposing production systems. The goal was to build a secure, realistic, and remotely accessible Cyber Range for learners.

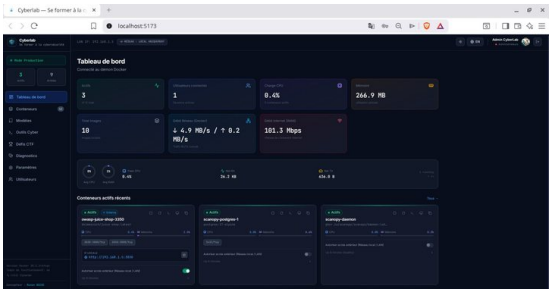
The Solution

Creation of a modern web platform providing isolated offensive and defensive scenarios, enabling students and continuing-education professionals to practice with real security tools in a safe, controlled setting.

Features and Instructional Design

- **Capture The Flag (CTF):** library of 100 realistic challenges across 7 cybersecurity domains (Web, Networking, OSINT, Cryptography, etc.).
- **Isolated Docker Labs:** 15 operational tools (nmap, sqlmap, Metasploit) containerized to ensure strict environment isolation.
- **Audit Reports:** HTML report generator to document vulnerabilities and remediation plans.

Tech Stack: Antigravity, GitHub, Docker (isolated containerization), HTML/CSS, Google Workspace Pro.



Demo Video (YouTube)

03. Sovereign E-Learning and Wiki Platform

DokuWiki | PHP | Linux / Debian

Technical education relies on durable, well-structured materials accessible from anywhere, without costly proprietary licenses or external cloud lock-in.

The Solution

Deployment and administration of an open-source collaborative platform (DokuWiki) acting as an e-learning backbone and knowledge repository for certifying courses (Linux, Cybersecurity, Networking).

Instructional Design and Features

- **Curriculum Modeling:** structured digital tracks tailored to autonomous, fully remote learning.
- **Role-Based Access Control (RBAC):** clear separation between instructor materials and student spaces.
- **Hands-on Workshops:** guided technical labs and advanced step-by-step tutorials.

Tech Stack: DokuWiki (database-free open source), PHP, hardened local Debian servers.

Visit the Wiki Platform

04. M-SCAN: Sovereign AI-Driven Network and Web Audit Platform

Python / Flask | Docker | Kali Linux | Ollama / Gemini | Tor

Organizations need to map their assets, uncover vulnerabilities before attackers do, and produce actionable compliance reports without leaking sensitive data to public clouds.

The Solution

Comprehensive interactive web dashboard (Flask / Docker / Kali) orchestrating 36+ cybersecurity tools for operational audits and advanced labs, paired with a hybrid AI copilot (100% local Ollama or Gemini) generating CISO-level summaries.

Cybersecurity Value and Key Features

- **Web and Multi-Target Scans:** parallelized 9-stage automated pipeline (Nmap, Nuclei, Gobuster, SQLMap, CMS-Scan).
- **Dynamic LAN Topology:** interactive mapping (vis-network) of LAN hosts, SMB shares, and Active Directory (Kerberoasting, AS-REP).
- **Sandboxed AI and Compliance Reporting:** DevSecOps remediation advice via local Ollama or Gemini; watermarked PDF, Word, SARIF v2.1.0, NIS2 / ISO 27001 alignment.
- **Privacy (OnionHop):** native Tor traffic routing with one-click IP rotation (NEWNYM signal).

Tech Stack: Python (Flask, Blueprints), SQLite, HTML5/CSS3/JS (Chart.js, Vis-network), Ollama Docker, Gemini API, Docker Compose (Kali Linux).

GitHub Repository · Video Walkthrough (YouTube)

05. MIA: Local AI Assistant, Hybrid RAG, and Code Studio

Python | PyQt6 | Ollama | ChromaDB / RAG | CUDA

Generative AI adoption faces two key obstacles: data confidentiality and GPU hardware costs. The objective was to deliver a complete, 100% local and offline AI workstation running smoothly on modest laptops (4 GB VRAM or CPU).

The Solution

Linux desktop application (PyQt6 / QWebEngine / QScintilla) powered by Ollama, combining a multi-profile AI chat, hybrid RAG search (ChromaDB + BM25), a mini-IDE with visual Diff, teaching utilities, and a bias management studio (Heretic / GGUF).

Key Features and Instructional Design

- **AI Chat and 18 Profiles:** instant switching across 4 GB VRAM models (qwen2.5-coder:3b, CyberSecQwen-4B), 7B/8B cybersecurity models (WhiteRabbitNeo, VulnLLM-R, Foundation-Sec, RedSage), and vision.
- **Automatic Hardware Optimization:** startup CPU/RAM/VRAM detection, Eco 4GB/Standard/Max tiers, Flash Attention + quantized KV-cache, and VRAM purging.
- **Hybrid RAG and Cyber Council:** local folder indexing (PDF, Markdown, code, logs) with clickable citations; 3-pass Red/Blue/Purple audit and Heretic bias test bench.
- **Code Studio and Teaching Tools:** QScintilla editor with AI auto-fix, LaTeX/KaTeX, Mermaid, Chart.js, Moodle quiz export (.gift), DokuWiki, HTML slide decks, and batch grading.

Tech Stack: Python, PyQt6, QWebEngine, QScintilla, Ollama (100% local), ChromaDB, BM25, GGUF/Hugging Face, Ubuntu/Debian, CUDA.

GitHub Repository

06. Docker Manager: Cyber-Range Lab Graphical Orchestrator

Python | Tkinter | Docker | Linux / Windows

Delivering hands-on cybersecurity, networking, and cryptography labs requires quickly spinning up and monitoring isolated environments — including in offline or bandwidth-constrained training rooms.

The Solution

Lightweight cross-platform desktop GUI in Python / Tkinter (zero external pip dependencies) to deploy, monitor, and administer Docker lab containers, with native offline workflows.

Key Features and Educational Use

- **16 Built-in Cyber-Range Templates:** 4 Kali Linux profiles, vulnerable web apps (DVWA, OWASP Juice Shop), defensive/SIEM stacks (Suricata, Snort 3, Wazuh, Prelude, Cowrie), Samba SMB, and crypto/IAM tools (CyberChef, Vault, Keycloak).
- **Native Offline Mode:** GUI import/export of .tar archives (docker load/save), local cache detection, and offline_deps/ + offline_images/ kit handling.
- **Real-Time Supervision and Isolated Networks:** CPU/RAM/IP/port metrics, live logs, cross-platform interactive terminals (Linux/Windows), Bridge/Macvlan networks with static IPs, and custom template export (docker commit).

Tech Stack: Python 3.8+ (standard library), Tkinter, Docker Engine/Desktop, run.sh (Linux) and run.bat (Windows), MIT License.

GitHub Repository

07. Innovation: Local AI Deployment and RAG System

Ollama | OpenWebUI | Docker | RAG | CUDA / Debian

Unlock the productivity gains of Large Language Models (LLMs) while keeping 100% of confidential documents and institutional know-how inside the local network.

The Solution

Deployment of an air-gapped local AI stack combining Ollama inference with a secure OpenWebUI interface so teams and instructors can query internal knowledge bases with zero external data transfer.

Features and AI Expertise

- **RAG Architecture:** grounded answers retrieved from internal repositories to minimize hallucinations.
- **Air-Gapped Security and GDPR:** sovereign processing of HR, strategic, and educational documents.
- **Prompt Engineering:** curated prompt templates supporting daily team adoption.

Tech Stack: Ollama (Llama 3, Mistral), OpenWebUI via Docker, GPU/CUDA acceleration on Debian server.

08. Governance: BCP, DRP, and NIS2 Compliance

Debian | Bash / Python | EBIOS RM | NIS2

With escalating ransomware threats and stricter European regulations, transition from perimeter-only security to full organizational resilience.

The Solution

End-to-end business continuity leadership combining EBIOS RM risk analysis, technical/organizational incident response playbooks, and alignment with the NIS2 directive.

Cybersecurity and Governance Impact

- **Risk Analysis (EBIOS RM):** mapping critical assets and threat scenarios.
- **BCP / DRP and Backups:** degraded-mode procedures, rapid restoration, and encrypted, off-site, integrity-checked backups.
- **NIS2 Compliance:** strategic and operational alignment of IT governance.

Tech Stack: Hardened on-premise Debian 12/13 servers, Bash/Python automation scripts, redundant storage.

09. Sovereignty: Private Cloud Deployment (Nextcloud)

Proxmox | Debian | Nextcloud | SSL

Eliminate exposure to public cloud data leaks and GDPR compliance risks for strategic and personal organizational records.

The Solution

On-premise private cloud delivering internal collaboration, secure file sharing, and calendar/contact synchronization under exclusive technical and legal ownership.

Cybersecurity and GDPR Impact

- **Data Sovereignty:** exclusive control over hosting, transit, and data lifecycle.
- **Segmentation and Hardening:** Proxmox virtualization, reverse proxy, SSL certificates, and hardened Debian administration.

Tech Stack: Proxmox (VMs), hardened Debian 12, high-availability Nextcloud, Reverse Proxy / SSL.

10. GestiCourrier: Document Management Web Application

PHP | SQL | HTML / SCSS | JavaScript | Debian

Modernize incoming and outgoing correspondence tracking in public administration (traceability, data integrity, compliance) through a lightweight, sovereign web tool.

The Solution

End-to-end design and development of a centralized correspondence management web app built on Privacy by Design and Security by Design principles.

Cybersecurity and GDPR Impact

- **Strict RBAC and Traceability:** granular role permissions and full audit logs of all actions and approvals.
- **GDPR Compliance:** data minimization and controlled retention schedules.

Tech Stack: PHP, SQL (Merise modeling), HTML5, CSS/SCSS, JavaScript, Debian server, GitHub.

GitHub Repository

06 Professional Experience

Over 20 years combining IT leadership, cybersecurity, international cooperation, and education

From February 2027

Head of Continuing and Professional Education and Cybersecurity Lecturer

Institut UCAC-ICAM | Douala, Cameroon

- **Continuing Education Development:** strategic leadership of the professional training portfolio for companies and institutions across Cameroon and the CEMAC region.
- **Instructional Design and Partnerships:** custom technical/industrial curricula and coordination of the expert trainer network.
- **Higher Education Teaching:** teaching engineering students cybersecurity, cryptography, and infrastructure defense.

Since 2024

Project Officer – Gabon

Direction Catholique de la Coopération (DCC)

- **Volunteer Coordination:** logistical steering, administrative oversight, and on-the-ground human support.
- **Local Project Engineering and Partnerships:** strategic needs analysis, funding proposals, recruitment, and local stakeholder synergy.

2021 – 2027

IT Systems Manager (RSI) and Data Protection Officer (DPO)

Municipality | Conques-sur-Orbiel, France

- **Governance and Compliance (DPO):** IT governance, GDPR compliance, budgets, technical specifications, and procurement.
- **Cybersecurity and Sovereign Infrastructure:** BCP/DRP, backup strategy, server hardening, Nextcloud, and local AI on Debian.
- **Network and Asset Operations:** municipal network supervision, fleet lifecycle management, and service continuity.
- **Training and Digital Inclusion:** AI, cybersecurity, and lessons-learned workshops; staff training on Nextcloud and digital hygiene.

2009 – 2021

Independent Technical Consultant

Self-Employed | 37 Corporate and SME Clients

Diagnostics, scaling (virtualization, clustering), optimization, resilience (VPN, firewalls, backups), and team training across printing, audiovisual, transport, retail, hospitality, and crafts.

- **Cross-Functional Engagements:** security audits and GDPR compliance, web/e-commerce projects (PrestaShop, WordPress), and custom automation/database tools.
- **Vocational Training:** instructor in Database Modeling (CCI Carcassonne) and Sales Management (IRFA Carcassonne).

Key Clients: Portalliance (GSuite rollout for Airbus), 2iconsulting (security audits), Saur (VPN/Cloud/KPI training), RenaudPesage, Proselis (Azure/WordPress/DBMS), Mozaic Formation, Octogone, Pyramidia, Reivilo Colli, Service Courtage.

2013 – 2016

Technical Manager and Full-Stack Developer

Cadoetik | Nantes, France

- **Web, E-Commerce, and Automation:** PrestaShop/WordPress deployments, SEO optimization, and custom catalog automation scripts.
- **Technical Governance and Cybersecurity:** agency technical leadership and proactive website hardening.

2002 – 2012

IT Manager and Pedagogical Training Coordinator

CFP | Nantes, France

- **Multi-Site Administration:** deployment and management of a WAN interconnecting 9 campuses.
- **Pedagogical Governance and Teaching:** coordinating instructors, designing curricula, and teaching computer science, statistics, chemistry, and experimental methods.

1998 – 2000

Teacher and Bursar (Long-Term International Volunteer)

Séminaire Saint-Jean | Libreville, Gabon

- **Science Teaching:** secondary-level physics and chemistry instruction.
- **Administrative and Financial Management:** overseeing institutional bursary and logistics.

07 Qualifications and Degrees

INSTRUCTIONAL DESIGN

- **Bachelor's Degree in HR Management – Adult Education** | Université d'Avignon | 2008
- **Certification in Supporting Digital Autonomy** | AFPA | 2022
- **Work-Study Training Instructor Diploma** | ANFRA | 2005

GOVERNANCE AND TECH

- **Cyberdefense: Vulnerabilities and Attack Techniques (RNCP32123)** | Cegefos | 2022
- **Industrial Computer Engineering Program** | CNAM | 2002–2005
- **Ethical Hacking Certification** | Sysdream | 2017
- **Bachelor in Web Project Management and Digital Strategy** | CCI Carcassonne | 2020
- **Webmaster Certificate (Level III)** | Arinfo Nantes | 2012
- **PrestaShop Level I Integrator Certificate** | Paris | 2005

SCIENCES AND INDUSTRIAL PROCESSES

- **Bio-Industry Supervisory Certificate** (Industrial Process Control and Quality) | CNEAP | 2001
- **Higher National Diploma (BTS) in Chemistry** | ETSCO Angers | 1998

Start a Partnership or Training Project

Upskill your teams, co-design a continuing education track with Institut UCAC-ICAM, or discuss a cybersecurity initiative in Douala and across the CEMAC region.

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