

HAMZA ELKHATRI

Platform Engineer

Agadir, Morocco · UTC+1 (Full CET overlap) · Remote

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Languages: English C1 · French B2 · Arabic Native

PROFESSIONAL SUMMARY

Platform Engineer with 6+ years designing, deploying, and automating enterprise infrastructure across 7 countries on 3 continents. Architect of ORVEXA — a monitoring and provisioning platform running on **2,320+ endpoints**, reducing bare-metal campus provisioning from ~1 week to ~4 minutes (99.96% reduction). Deep experience in infrastructure as code (Ansible), containerization (Docker), CI/CD (GitHub Actions), observability (Prometheus/Grafana), and low-level systems programming (custom PAM module in C, ported to macOS). Proven track record of leading on-site deployments, training 10+ distributed teams, and building for handoff — not dependency.

TECHNICAL SKILLS

Infrastructure & Automation: Ansible, Docker, Docker Compose, Ubuntu Autoinstall, PXE Boot, GitHub Actions CI/CD

Cloud & Networking: AWS (Cloud Practitioner), Tailscale VPN, MikroTik Routing & QoS, Firewall Configuration

Monitoring & Observability: Prometheus, Grafana, Custom endpoint monitoring (ORVEXA), Uptime Kuma

Languages & Frameworks: TypeScript, Next.js, Python, C (systems), Bash, Node.js

Databases & Caching: PostgreSQL, Redis (pub/sub, caching)

Systems & Security: Linux Administration (Ubuntu/Debian), Custom PAM modules, macOS PAM (DirectoryServices), Wayland/Sway kiosk, Proxmox/KVM

Methodologies: Platform Engineering, Infrastructure as Code, GitOps, Async-first Collaboration, GDPR-aware Data Design

PROFESSIONAL EXPERIENCE

Platform Engineer | 01Edu (01Talent Africa / 01Talent International)

Official title: Senior Technical Implementation Specialist

December 2022 — Present · Agadir, Morocco (Remote)

01Edu is a peer-learning tech education company with ~3,000 students operating across Africa, MENA, and Europe.

ORVEXA — Enterprise Monitoring & Infrastructure Automation Platform

- Architected and deployed ORVEXA, a full-stack monitoring platform spanning **2,320+ endpoints across 7 countries** (Nigeria 1,000 · Morocco 300 · Bahrain 300 · Kazakhstan 300 · Kenya 200 · Senegal 120 · Greece 100), enabling real-time infrastructure observability with centralized alerting
- Reduced campus bare-metal provisioning from **~1 week to ~4 minutes** by engineering end-to-end automation with Ansible, PXE boot, and Ubuntu Autoinstall — measured across 216 installs at Zone01 Oujda (99.5% first-attempt success rate)
- Designed real-time event architecture using **Redis pub/sub + WebSocket** to support 300+ concurrent users per campus without saturating PostgreSQL connections
- Built **Prometheus + Grafana** monitoring stack with per-endpoint CPU, memory, network, and disk dashboards; configured MikroTik routers with QoS for campus-wide traffic management
- Implemented **Tailscale VPN mesh** for secure cross-campus connectivity — NAT traversal eliminated firewall configuration requirements in Nigeria and Bahrain
- Engineered **custom PAM authentication module in C** querying 01 platform API at login for access control; ported to **macOS via DirectoryServices** — zero platform-side code changes required
- Containerized full stack with **Docker Compose**; automated deployments via **GitHub Actions CI/CD** pipelines with Tailscale-tunneled private server access

Multi-Country Deployments & Team Enablement

- Led phased infrastructure rollouts across **7 campus deployments on 3 continents**, adapting strategies to varying network conditions, hardware availability, and local team capabilities
- Designed and delivered training programs for **10+ local IT teams**, enabling self-sufficient platform operations post-handoff — no ongoing dependency on central engineering
- Authored **30+ technical guides** — integration specs, data models, runbooks, and troubleshooting docs — used across all deployments

Wayland Secure Exam Kiosk

- Replaced fragile X11 lockdown stack with **Sway/Wayland-based secure exam environment** — Wayland's process isolation prevents keystroke capture by default, eliminating a class of exam integrity vulnerabilities
- Deployed across all campuses via Ansible with custom PAM integration enforcing exam-mode access at login

Founder | CyberStand — EdTech Startup

2023 — Present

- Building EdTech platform for Francophone Africa featuring **virtual Arduino & Raspberry Pi simulation** — students wire circuits and write firmware in-browser, no hardware needed
- Automated AI content pipeline: **n8n** → **ElevenLabs TTS** → **video generation** → **FFmpeg** merge for scalable course content production

Freelance Mobile & Web Developer | Self-employed

2019 — 2023 · Remote

- Delivered cross-platform mobile applications using **Flutter, Java (Android), and Xamarin**; built web interfaces with Tailwind CSS
- Containerized client environments with Docker Compose; managed deployment workflows for multiple concurrent projects

CERTIFICATIONS

AWS Cloud Practitioner — Amazon Web Services, 2026

42 Cursus Developer — 1337 School / 42 Network, 2025 · Level 13/21

Containers & Kubernetes Essentials V2 — IBM, 2024

CI/CD — Continuous Integration & Delivery — IBM, 2024

Monitoring & Observability for DevOps — IBM, 2024

+ 7 additional IBM certifications (DevOps Essentials, Cloud Computing, Linux, Python, Git, Agile, TDD) — credly.com/users/hamza-elkhatri

EDUCATION

1337 School — 42 Network · Khouribga, Morocco · 2019–2025

Software Engineering · Level 13/21 (~top 15% of cursus)

Global network of 50+ tuition-free campuses across 30+ countries (founded by Xavier Niel). Rigorous project-based curriculum with peer evaluation and no lectures. Admission via La Piscine — a 26-day intensive coding immersion. Built shell interpreter, memory allocator, and multi-threaded process manager in C.

Bachelor's in Engineering Mathematics & Computer Science · ENSA Khouribga · 2020–2021

Associate Degree in Computer Science · ISTA Mirleft · 2017–2019

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