Muhammad Nuh

Fullstack Developer / Automation, Cloud & Embedded Systems

Petaling Jaya, Malaysia (UTC+8) +60 11-1154 3759 ikanlemas0@gmail.com github.com/hexrogue hexrogue.github.io

SUMMARY

Fullstack developer with 6 years in IT and 1 year in electronics. I build automation, internal tools, and web applications, then go down the stack into Linux, cloud, networks, and firmware when the problem asks for it. Currently building APEL.A, the first APEL.A admissions system in Malaysia, at SKC Education Global.

EXPERIENCE

Fullstack Developer / SKC Education Global

OCT 2025 - PRESENT

- Built APEL.A, the first APEL.A admissions system in Malaysia: portfolio builder, evidence uploads, exams, interviews, scheduling, payments, and candidate tracking.
- Built and maintain the admissions CRM: lead pipeline, role-based access, study-plan PDF generation, WhatsApp automation, and commission tracking.
- Built SKC Central, the internal operations platform for finance, scheduling, teaching records, and admin.
- Developed a Go-based WhatsApp gateway with VoIP support, deployed with Docker.
- Reduced frontend bundle size by 40% and improved Lighthouse scores.

Freelance Developer / Self-employed

2025

- Built small business sites and internal tools for local clients.
- Set up lead follow-up automation and WhatsApp integrations.

SELECTED PROJECTS

APEL.A Admissions Portal

PRIVATE CLIENT

`Next.js, TypeScript, PostgreSQL, Drizzle, Better Auth, Puppeteer`

First APEL.A admissions system in Malaysia. Candidate portal, portfolio builder, competency checklist, evidence uploads, exam and interview scheduling, proctoring signals, payments, finance, audit trails, and read-only share links.

Admissions CRM

PRIVATE CLIENT

`Next.js, TypeScript, Drizzle, PostgreSQL, Puppeteer`

Admissions platform replacing spreadsheets, email, and paper. Lead pipeline, RBAC, study-plan generation, WhatsApp automation, and commission tracking.

WhatsAPI

PRIVATE

`Go, whatsmeow, Docker, WebSocket`

Self-hosted WhatsApp gateway with messaging, VoIP, real-time events, QR and pairing auth, and SQLite/PostgreSQL support. Powers CRM messaging and calls.

Xray Workers

OPEN SOURCE

`TypeScript, Cloudflare Workers, D1`

Serverless VLESS proxy with D1 user management; edge-deployed with no VPS to patch. github.com/hexrogue/xray-worker

More: SKC Central, SKC Advisor Chatbot, CareerGap, PrayerTime, City2Coordinates, ESP32 Recon Rig.

SKILLS

Languages	Go, TypeScript, JavaScript, Python, PHP, Bash, SQL, C	**Automation**	Puppeteer, pdf-lib, pagedjs, ExcelJS, Nodemailer, WhatsApp APIs
Frontend	Next.js, React, Tailwind CSS, Hugo, TanStack Table	**Networking**	802.11, BLE, sub-GHz, OpenWrt, VLANs, WireGuard, Wireshark
Backend	Node.js, Express, PostgreSQL, SQLite, MySQL, Redis, Drizzle, Better Auth	**Security**	Burp Suite, Ghidra, radare2, Frida, GDB, Nmap, Metasploit
Cloud & Infra	AWS (S3, Lambda, EC2, CloudFront), Google Cloud, Kubernetes, Docker, Cloudflare Workers/D1/KV, Vercel, Nginx, Caddy	**Hardware & Systems**	ESP32, ESP-IDF, sensors, serial, Arch Linux, Proxmox, Git, CI/CD

EDUCATION

BSc Software Engineering / Universiti Tun Abdul Razak

MAR 2026 - PRESENT

3.8 CGPA last semester. Studying while working full-time.

WRITING

56 write-ups on software, networks, hardware, security, and career at hexrogue.github.io/blog. Also a research notebook on edge computing at hexrogue.github.io/research.