AJMAL M S

Software Engineer | Full-Stack Developer | TypeScript · React · Next.js · Node.js · NestJS · Python

Pathanamthitta, Kerala, India | +91 85905 08376 | hireajmal@gmail.com | linkedin.com/in/ajmalms | github.com/AjmalX0 | ajmalx0.dev

Also a cybersecurity professional – see my Cybersecurity resume (attached inside this PDF): ajmalx0.dev/assets/resume-security.pdf

PROFESSIONAL SUMMARY

Software engineer doing freelance cybersecurity and software development work since 2019, delivering client projects through multiple freelance platforms and direct referrals. Started with Python and web development, built and ran a series of open-source Node.js WhatsApp and Telegram bots from 2021 to 2023, then worked professionally as a Full Stack Developer at Coxdo Solutions and a Cyber Security Engineer at RzQuick.app. Builds end-to-end products: Turborepo monorepos with NestJS and Next.js, React Native and Flutter mobile apps, WhatsApp Business CRMs, real-time LMS platforms and AI services (face recognition with vector search, LLM agents) on PostgreSQL, Supabase, MongoDB and Redis. Also works as an application security engineer, so authentication, authorization and OWASP Top 10 defenses are designed in from day one. Maintains 368 GitHub repositories (public and private), almost all original projects.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, SQL, Java, C, C++, C#, Dart, PHP, Rust, Bash/Shell

Frontend: React.js, Next.js (App Router, RSC), React Hooks, Redux, Zustand, TanStack Query, Tailwind CSS, shadcn/ui, Framer Motion, HTML5, CSS3, Three.js/WebGL

Backend: Node.js, Express.js, NestJS, Django, Flask, FastAPI, REST APIs, Socket.IO, webhooks, background jobs (Redis queues, cron, Inngest), JWT/OAuth authentication

Mobile: React Native (Expo), Flutter (Provider)

Data & AI: PostgreSQL, Supabase (RLS, RPC, Realtime, Storage), Prisma, Kysely, MongoDB/Mongoose, MySQL, SQLite, Redis, Neo4j, pgvector, InsightFace/ONNX, OpenAI, Gemini and Claude APIs, LangChain

Integrations: WhatsApp Business Cloud API (Meta Graph API), Baileys, Telegram Bot API, YouTube Data API

DevOps & Practices: Git, GitHub, Docker, CI/CD, Vercel, Render, Heroku, Linux (Arch), Turborepo, pnpm, Vitest, Playwright; system design, secure coding (OWASP), RBAC, code review, Agile

PROFESSIONAL EXPERIENCE

Freelance Cybersecurity & Software Development **2019 – Present**

Self-employed (multiple freelance platforms and direct clients), Remote

- Freelancing since 2019 in both cybersecurity and software development: won and delivered client projects end to end, from requirements and design to deployment and support.
- Built web platforms, admin dashboards, mobile apps, WhatsApp bots and CRM automation for real-estate, healthcare, education, retail and services businesses.
- Closed and delivered cybersecurity engagements for clients: web and API penetration tests, vulnerability assessments and remediation guidance.

Cyber Security Engineer – Application Security & Pentesting **Oct 2025 – Nov 2026**

RzQuick.app, Kochi, India

- Pentest web applications and APIs against the OWASP Top 10, then work with developers to fix and re-verify each vulnerability.

Full Stack Developer **Jan 2025 – Jul 2026**

Coxdo Solutions, Kochi, India (Hybrid)

- Built and maintained scalable full-stack applications for client projects using Python (Django), React, Next.js and the MERN stack.
- Developed secure REST APIs, authentication flows and backend business logic on PostgreSQL, MongoDB and MySQL.
- Implemented responsive interfaces with reusable React components and improved front-end performance.
- Integrated third-party APIs, cloud services and automation workflows into production applications.

PROJECTS

Multi-Role Real-Estate Platform (freelance client project)

Tech: Next.js 15, NestJS 10, Kysely, Supabase (PostgreSQL + RLS), React Native (Expo), Zod, Turborepo, pnpm

- Architected a Turborepo monorepo: public website, four role-based dashboards (individual, agent, developer, admin), a NestJS business API (ledger, workflows, payments) with Swagger docs, and an Expo mobile app sharing Zod contracts and generated DB types.
- Built buy/sell/rent and off-plan sales flows (EOI → reservation → sales agreement), KYC, leads, viewings and agent commissions, secured with Row-Level Security and a Supabase access-token hook for role claims.

Snap Find – AI Face-Recognition Event Photo Platform
Tech: Next.js, TypeScript, Python, FastAPI, InsightFace, ONNX Runtime, OpenCV, pgvector, Redis + RQ workers, Supabase, Docker

- Built a multi-tenant SaaS where photographers upload event galleries and guests scan a QR code and take a selfie to instantly find every photo they appear in, with subscription plans per organization.
- Wrote a FastAPI AI engine for face detection, quality scoring, embedding generation, clustering and similarity search over pgvector, processed asynchronously by Redis/RQ workers with Prometheus metrics.

PaceLab LMS – White-Label Learning Management System
Tech: Next.js 14, NestJS 10, Prisma, PostgreSQL, Redis, Socket.IO, JWT, Docker

- Built a white-label LMS with admin-only onboarding, admin/instructor/student roles, JWT access + refresh tokens in HttpOnly cookies, YouTube-integrated lessons with watch-time progress tracking, and real-time chat and Q&A over Socket.IO and Redis.

VulnGraph – Vulnerability Intelligence & Dependency Graph
Tech: Python, FastAPI, Celery, Redis, PostgreSQL, Neo4j, Next.js, TypeScript, Docker Compose

- Syncs CVE, NVD, OSV, GitHub Advisory, CISA KEV and EPSS data, resolves lockfiles in 15+ ecosystems, maps dependency paths in Neo4j and proposes minimal safe upgrades as approval-gated pull requests, with RBAC, audit logs and a multi-provider AI investigator.

WhatsApp Business CRM (freelance client project)
Tech: Node.js, Express.js, WhatsApp Cloud API (Meta Graph API), Supabase, React, Vite, TanStack Query, node-cron

- Built a multi-agent WhatsApp inbox with contacts, segments, approved message templates, media handling, delivery webhooks and cron-scheduled follow-up workflows; also built ConnectFlow, a campaign and analytics CRM in React and TypeScript.

CyberSahayi – WhatsApp First-Response Assistant for Cyber-Fraud Victims
Tech: TypeScript, Node.js, Baileys, Next.js 16, Supabase Realtime, Claude API, Whisper, Playwright

- Triages fraud reports in Malayalam, English and Manglish from text, voice notes and screenshots, sends the 1930 “golden hour” alert, generates police-ready PDF complaint packs and hands chats to volunteers on a live dashboard.

Cyber Club CTF Portal – Serverless Capture-The-Flag Platform
Tech: Next.js 15, React 19, TypeScript, Supabase (PostgreSQL, RLS, Realtime, pg_cron), Zod, Vitest

- Multi-event CTF platform with dynamic scoring, live scoreboard and admin panel; flag submission runs inside PostgreSQL with advisory locks and rate limits, covered by 70+ database tests including concurrency.

Aura – AI Therapist and Mental-Health Companion
Tech: Next.js, TypeScript, Express.js, MongoDB, Gemini and OpenAI APIs, LangChain, Inngest, JWT

- Built AI therapy chat sessions, mood and activity tracking with progress analytics, and event-driven background AI analysis with Inngest behind JWT-secured REST APIs.

WhatsApp & Telegram Bot Series – Wizard v1/v2, Wizard-MD, Wizard-Ser, Wizard ReBorn, Legacy (2021 – 2023)
Tech: Node.js, Baileys (WhatsApp Web multi-device), Sequelize, PostgreSQL/SQLite, FFmpeg, Docker, Heroku

- Built and maintained open-source, plugin-based WhatsApp bots with multi-device sessions, media processing (stickers, audio and video conversion), group administration and scheduled jobs, plus Telegram and Instagram downloader bots, with one-click Heroku and Docker deployment.

More: Vidya, a Flutter AI tutor with Malayalam support built at the Innovate 2.0 48-hour hackathon (InApp × IEEE Kerala YP); Rust systems projects K-Guard (eBPF runtime security) and ProofTrail (cryptographic chain of custody). 368 GitHub repositories (public and private), almost all original projects at github.com/AjmalX0; many private client repositories available on request.

EDUCATION

Bachelor of Technology (B.Tech), Computer Science and Engineering (Cyber Security) **Sep 2024 – Jun 2028 (Expected)**
College of Engineering Kallooppara, APJ Abdul Kalam Technological University (KTU), Kerala

CERTIFICATIONS

- **Certified Red Team Analyst (CRTA)** – CyberWarFare Labs, Jan 2026
- **Certified Network Security Practitioner (CNSP)** – The SecOps Group, Nov 2025
- **Certified Cybersecurity Educator Professional (CCEP)** – Red Team Leaders, Nov 2025

ACHIEVEMENTS & LEADERSHIP

- NASA International Space Apps Challenge 2025 (local event): Best Use of Science award (Senior category) and Top 10 of 500+ teams.
- NASA Vulnerability Disclosure Program Hall of Fame (via Bugcrowd), 2026; Top 1% on TryHackMe; Chaitanya CTF 2025: 5th of 500+ teams.
- Cyber Club, College of Engineering Kallooppara: Technical Lead for the 2025–26 term, now Vice Chair; CTF developer building CTF events for colleges.
- Conducted multiple online and offline technical sessions and workshops (e.g. SKILLFORGE 2.0, ISTE SC RIT); hackathon mentor at Tech Thrive 2.0 (RIT Kottayam); Finance Lead, IEDC.

LANGUAGES

English (professional working proficiency – speaking, reading, writing), Malayalam (native), Hindi (professional working proficiency)