Ayaan Ansari

Software Engineer | AI-Assisted & Agentic Development | Mumbai, Maharashtra
+91 626 899 3859 ayaan35200@gmail.com linkedin.com/in/aiyu github.com/aiyu-ayaan

Summary

Engineer who ships production systems through an **agentic, spec-first workflow**: architecture, threat model, and phased backlog written as machine-readable context (`CLAUDE.md`, decision logs) so coding agents execute against a contract. I own review, integration, and hardening. Recent work: an 8-service E2EE platform with desktop, web, and Android clients, plus a **multi-agent orchestration framework** for Android. Day job: C#, Azure Functions, APIM, .NET Core.

Experience

Adrosonic **Jun 2025 – Present**
Software Engineer *Mumbai, Maharashtra*
- Own delivery on two live client projects using **C#, .NET Core, Azure Functions, and APIM**. Use AI coding agents daily: I brief them against written architecture, then review and integrate the output instead of merging it as-is.

Adrosonic **Dec 2024 – Jun 2025**
Software Engineer (Trainee) *Mumbai, Maharashtra*
- Built an enterprise **POC** for **Dynamics 365 + Instanda** integration that cut process automation time by 40%. Also handled WordPress and .NET Framework work alongside it.

BeyondSchool **Jul 2022 – Mar 2023**
Android Developer Intern: shipped TTS/STT accessibility (+35% engagement) and gamification (+40% retention) *Ranchi, Jharkhand*

Projects

BetweenUs | *NestJS, TypeScript, Electron, React, Kotlin/Compose, WebRTC, PostgreSQL, Redis* **Aug 2026 – Present**
- Built **8 NestJS microservices** (auth, server, chat, presence, notifications, call-service, admin) behind Nginx :8080, with Electron/React web and native Jetpack Compose Android clients in one **pnpm + Turborepo** monorepo.
- Implemented **E2EE messaging** (AES-256-GCM on-client with **WebCrypto** on Desktop/Web and **javax.crypto** on Android). The server stores and routes ciphertext only and never sees plaintext.
- Built a **P2P WebRTC mesh** with no media server: call-service handles signalling only (roster, SDP, ICE candidates) and media goes direct between clients over DTLS-SRTP, so nothing forwards UDP past the Cloudflare Tunnel and no ports are published.
- Caught and fixed three authorization flaws in agent-written code: member-add bypassing invites, moderator-over-admin escalation, and unauthenticated attachment reads; wrote `CLAUDE.md` (target architecture), `development/E2EE.md` (threat model), and decision logs so agents execute against a contract.

LoadPulse | *React, Node.js/Express, MongoDB, Socket.IO, k6, Redis, Gemini* **Apr 2026 – Present**
- Performance testing workspace: live dashboard via **Socket.IO**, concurrent **k6** test execution, cron + API hook integrations, **Redis-backed API caching**, **MongoDB field-level encryption**, and PM2 cluster mode scheduler singleton pattern.
- Integrated **AI k6 script generation** via **Gemini, Groq, OpenRouter**, turning plain-English descriptions into k6 scripts with custom metrics, thresholds, and ramp-up profiles. Added **GitHub OAuth + TOTP 2FA**, an admin console, and test history search/stop.

Aiyu: Portfolio & CMS | *Next.js 16, React 19, PostgreSQL, Prisma, Gemini, Docker* **Mar 2025 – Present**
- **AI Neural Core** (Gemini) that generates 64+ token design systems from a prompt, names projects, and maps tech stacks. Also a visual 60s cron scheduler with AES-256 encrypted **${env.KEY}** secrets and dynamic variable evaluation, 52 preset themes, a Markdown blog editor with Notion sync, and a full-screen LaTeX resume IDE with AI refinement.
- Exposed **MCP server** with custom tools; dual-routed contact webhooks to **n8n, Discord, Telegram, ntfy**; live server health monitoring and AI-powered log analyzer.

Also Built

CodeDock: self-hosted Codespaces alternative provisioning code-server containers via the Docker SDK (Go). **CodePilot**: local-first CI/CD dashboard running GitHub Actions via `nektos/act`. **Roadlyn**: AI roadmap SaaS wiring **LangChain** and the **Vercel AI SDK** into Fastify with BullMQ jobs. **Domus**: local-first smart home platform (Next.js + FastAPI + MQTT). **BIT App**: campus Android app, 1000+ students, 4.7/5 on Play Store. **TTS-Engine**: Android TTS library on JitPack, 500+ downloads.

Skills

AI & Agents: Agentic coding workflows (spec/context files, decision logs, phased execution), multi-agent orchestration, tool registries, LLM APIs (Gemini, OpenAI, Claude, local), LangChain, Vercel AI SDK, function calling, structured outputs, system-prompt design, n8n
Stack: TypeScript, Kotlin, Python, C#, Go, Java, SQL; NestJS, Fastify, FastAPI, .NET Core, Azure Functions, APIM, WebSockets, WebRTC; Next.js, React, Tailwind, Electron, Jetpack Compose, Kotlin Multiplatform
Data, Infra & Architecture: PostgreSQL, MongoDB, Redis, Prisma, Firebase, BullMQ, Docker, Nginx, Azure, GitHub Actions; microservices, pnpm + Turborepo monorepos, Clean Architecture, MVVM, E2EE (AES-256-GCM), JWT refresh-token rotation, OAuth

Education

Birla Institute of Technology, Mesra | *Master of Computer Applications, CGPA 8.1/10.0* **Aug 2023 – May 2025**

Birla Institute of Technology, Mesra | *Bachelor of Computer Applications, CGPA 8.2/10.0* **Aug 2019 – May 2022**