Sam Joe Chalissery

Thrissur, Kerala

Portfolio | LinkedIn | Github

Email: samjoe55555@gmail.com | Mobile: +91 90745 99160

Summary

CS undergraduate at IIIT Kottayam with professional experience architecting distributed systems, scalable backends, and AI-integrated platforms. Strong foundation in software design and concurrent processing.

Education

Indian Institute of Information Technology — *Kottayam, Kerala*

Bachelor of Technology in Computer Science Engineering | ***CGPA 8.8*** — *May 2028*

Courses: Data Structures, Object-Oriented Analysis and Design (OOAD), Operating Systems, Advanced Engineering Mathematics.

Experience

Statts — *Aug 2025 – Present*

Junior AI Engineer — *Canberra, Australia*

- Engineered a **multi-phase AI document automation platform** using Gemini and FastAPI across **5 production workflows**, reducing manual compliance processing time by **70%** via real-time WebSocket streaming
- Developed **REST APIs and a dual-protocol server** handling highly concurrent AI processing sessions, implementing robust synchronization and RBAC to achieve sub-200ms average response times.
- Built a **dual-platform AI real estate suite** in Next.js and React Native, delivering 9-section property analysis reports across **200+ listings** via a real-time **Apify scraping pipeline** with **95%+ field completion accuracy**

National Technical Research Organisation (NTRO) — *May 2026 – July 2026*

Cybersecurity Intern — *New Delhi, India*

- Researched and compiled **cybersecurity intelligence** within a classified, high-confidentiality environment at India's national intelligence agency, operating under strict security protocols

Projects

Buffer — Offline-First Command-Driven Workspace - Website

- Architected an **offline-first productivity application** with multi-layer local and cloud sync using **IndexedDB and Convex**, achieving **sub-100ms save times** and **under 500ms initial load**, utilizing **Yjs CRDT** for complex state synchronization and conflict-free real-time collaboration.
- Engineered a **multi-window workspace** supporting up to **6 concurrent panels** with full state persistence across **11 content viewers**, shipped as a **cross-platform Electron desktop app** with deep link protocol handling and auto-update pipeline

SightHog — Browser Telemetry & Session Replay Platform - Website

- Built a **self-hosted open-source session replay platform** with a drop-in **TypeScript SDK** capturing DOM snapshots and network logs to facilitate complex systems data analysis and debugging, featuring SDK-side frustration detection for rage clicks, dead clicks, and error clicks
- Engineered a **high-throughput Kafka ingestion pipeline** in **Go** with **3 independent consumer groups** routing up to **500 events per flush** across **PostgreSQL, ClickHouse, and object storage**, deployed as a fully containerised **9-service Docker** setup

Nirikshan — IoT Security Auditing & Penetration Testing Platform - Website

- Built a **Shodan-inspired network reconnaissance platform** using **Next.js and FastAPI** performing active **device fingerprinting** and auto-classification of **CCTVs, DVRs, and NVRs**, streaming scan results in real time over **WebSocket** via a three-phase **Nmap and ONVIF** pipeline
- Integrated **CVE-mapped exploitation** using **Metasploit** with **15 exploit modules** and a dual **AI architecture** combining **Gemini** for cloud-based attack assistance and a local **Ollama LLaMA model** for offline, privacy-first device analysis

Skills

Languages & Frameworks Skills: C, C++, Python, JavaScript, Go, TypeScript, Dart
Frontend & Mobile Skills: Next.js, React.js, React Native, Flutter, Tailwind CSS, Expo
Backend & Databases Skills: FastAPI, Node.js, PostgreSQL, Supabase, Firebase, MongoDB, SQLite, ClickHouse, Kafka
Tools & Platforms Skills: Docker, Git, Figma, Vercel, Electron, WebSocket, Nmap, Metasploit

Awards & Achievements

- **Won Smart India Hackathon 2025** with a 6-member team, developing a cybersecurity solution for NTRO