

Arshad A

Software Engineer

📞 +91 8589840073

✉️ arshadayanikkal@gmail.com

🌐 [LinkedIn](#)

🐙 [GitHub](#)

🌐 [Website](#)

Profile

Full-stack engineer with hands-on experience across **platforms serving 100k+ monthly users** and **16M+ requests/month**. Focused on frontend architecture, backend services, and performance-critical delivery - with **security practices embedded at every layer**. **CERT-In Hall of Fame** - Government of India's national cybersecurity recognition - for securing **2 lakh+ individuals' data**. Accelerates engineering throughput through **agentic development workflows**.

Technical Skills

Tech: NestJS, Express.js - React (Next.js), TanStack (Query, Table, Form), Zustand, Redux, Zod, Tailwind CSS, Storybook

AI: Claude Code, Codex CLI, GitHub Copilot OpenCode — MCP-integrated workflows (Figma, Supabase, GitHub)

Infra: AWS (EC2/S3/R2), Supabase, Docker, CI/CD, Cloudflare, Sentry, Coolify

Data & Tooling: PostgreSQL, MongoDB - OpenAPI Swagger + Codegen, Socket.IO, Git

Experience

ELT Global Pvt Ltd

Software Engineer

Aug 2024 – Present

On-Site (Bangalore) / Full-time

- Contributed across frontend and backend to an EdTech platform operating at **10k+ DAU** — two core products: a **student-facing LMS** and an **admin operations portal** — building **SDUI-driven interfaces** where backend controls screen rendering without client redeloys.
- Built automation tools for both **business operations** (Google Apps Script, Sheets and Classroom workflows) and **dev infrastructure** (Docker crash monitor with Slack alerting) — eliminating **3–4 hours/day** of repetitive overhead.
- Established a **type-safe OpenAPI Swagger + Codegen pipeline** — auto-generating all API schemas and TypeScript types from a single command, **reducing frontend-backend integration overhead by ~60%**.
- Implemented **security hardening** across auth flows, token rotation, RBAC, input validation, and request signing — embedding security practices at the infrastructure layer, not as an afterthought.
- Improved overall page performance by **35–40%** through code-splitting, TanStack Query cache-first patterns, request deduplication, and API batching. Cut a key analytics API payload by **~87%** through client-side derivation.

Brototype

Full Stack Engineering Intern

2023 – 2024

Calicut / Full-time

- Built and shipped a freelancer marketplace with real-time collaboration via **Socket.IO**, **Stripe** payments, **AWS EC2** deployment, and a ranking algorithm for freelancer discovery.
- Developed a full e-commerce platform with stock management, coupon engine, **Razorpay** integration, session-based auth, and admin panel — deployed end-to-end.

Projects

Triple i Admin Portal | Next.js, NestJS, PostgreSQL, Zustand, TanStack (Query, Table, Form), React Hook Form, Zod, Storybook

- Engineered an **SDUI-powered scheduling module** that transforms sparse API responses into an O(1) date-keyed lookup map, pre-computes all month sections across the full date range at mount, and resolves full-day/partial-day instructor availability conflicts before scheduling.
- Built a configurable **fee policy builder** with runtime Zod schema switching, a business-rule validation layer decoupled from schema validation, and ref-driven derived state via React Hook Form — eliminating re-renders across complex multi-section forms. Integrated an **event bus** for cross-module state propagation.
- Built a **Google Drive-style file management system** with upload, rename, nested folders, and RBAC-based access controls — TanStack Table for data layer, Zustand for state, Zod for validation.
- Established a **Figma-to-code design system** — translating Figma design tokens and class conventions directly into a reusable component library, validated through **Storybook** for visual regression testing and isolated development — ensuring pixel-perfect consistency between design and implementation.

Triple i Learning Platform | Next.js, NestJS, PostgreSQL, HLS, WebRTC, SSE, SDUI

Live

- Implemented a fully **SDUI-driven exam module** supporting objective, descriptive, and scenario-based questions with dynamic image rendering — backend-controlled question layouts and scoring logic without client redeloys.

- Built **NestJS backend services** for student exam analytics — score banding, percentile computation, and multi-cohort comparative reporting — surfaced through **zoomable client-side charts** with rank computation and multi-dimensional filtering.
- Delivered live-class infrastructure with **HLS** streaming and **WebRTC**, role-based screen-control management, and **SSE**-driven real-time schedule notifications for students.

Recognition

CERT-In Hall of Fame | *Ministry of Electronics & IT, Government of India*

Aug 2025

- Discovered and responsibly disclosed critical vulnerabilities in a leading Kerala university's web infrastructure, protecting **2 lakh+ students'** data from exposure. Reverse-engineered the backend, documented the full attack surface, and submitted a detailed remediation report to CERT-In.
- Covered by [Onmanorama](#) and [Mathrubhumi](#) — two of Kerala's largest media publications.