

Krishna Agarwal

Full-Stack Developer · Frontend Engineer · Open Source

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SUMMARY

Full-stack developer (2+ yrs) who ships and **owns production** React/TypeScript and Node.js systems end-to-end. I take on the hard parts — a browser-native video engine on the **WebCodecs API**, **GenAI features** on Google Gemini, and accessible design systems — backed by E2E testing, performance work, and open-source tools my team relies on daily.

TECHNICAL SKILLS

Languages: JavaScript (ES2022+), TypeScript, SQL, HTML5, CSS3

Frontend: React.js, Next.js (App Router, RSC, Server Actions), React Native, Redux, Zustand, Tailwind CSS, GSAP, Radix UI, Zod, React Hook Form, WebCodecs

Backend & Data: Node.js, Express.js, PostgreSQL, MySQL, Drizzle ORM, REST APIs

AI / GenAI: Building LLM features into products — Google Gemini API, semantic search (RAG), prompt engineering

Cloud, DevOps & Testing: Docker, CI/CD, Vercel, Cloudflare R2 / S3, Git, Jest, Cypress, Playwright, Vite, Webpack

Practices: Web Accessibility (WCAG 2.1 AA), Design Systems, Performance Optimization, Chrome Extensions, Agile/Scrum

PROFESSIONAL EXPERIENCE

Frontend Engineer (Full-Stack) — **Spark Eighteen** · Udaipur, India Sep 2023 – Present

Frontend Intern (Sep 2023) → Jr. Frontend Developer (Apr 2024) → Frontend Engineer (Apr 2025 – Present)

- Build and ship features **full-stack** — PostgreSQL schemas and Node.js/Express REST APIs alongside the React/Next.js UI — on a **Microsoft-backed agri-tech platform** serving 350+ farmers.
- Cut manual data-entry time **~40%** by owning features end-to-end, and engineered data-driven forms with Zod + React Hook Form and Razorpay payment integration.
- Reduced escaped production bugs **~50%** by building and managing a Cypress + Playwright **E2E suite** in CI/CD; held page loads **~30%** faster (Lighthouse 90+).
- Accelerated feature velocity **~25%** with a company-wide design system, and **published 3 open-source npm/npx tools** adopted across all engineering repos.
- Led full-stack development of **Dev Library**, an internal GenAI tool, and mentored junior developers through technical brown-bag sessions.

Frontend Developer Intern — **Dizart Solutions** · Udaipur, India Dec 2022 – Apr 2023

- Built React Native + Node.js/MySQL features for 500+ users and delivered the team's **first cloud deployment** to production.

PROJECTS

Stitch — **Browser-Native Video Engine & Remix Platform** — Next.js 15 · TypeScript · WebCodecs · PostgreSQL · Drizzle · R2

- Built a from-scratch in-browser video editor on the **WebCodecs API** — custom timeline compositor with hardware-accelerated H.264 encode/decode (mp4-muxer) — exporting MP4 reels fully client-side, no server render.
- Architected the full-stack platform: Next.js 15 Server Actions, NextAuth (Google OAuth), Drizzle/Postgres, and Cloudflare R2 presigned uploads, with a fork/remix lineage graph.

Fable — **Group Trip Chat, Expense-Splitting & Live Map** — React Native · Expo · TypeScript fable.measdev.me

- Built and shipped (closed beta) a group-trip app where the **chat itself is the ledger** — log an expense in chat, tag who's in, and forward a payment screenshot to **auto-read the amount**; trips get a live map that ends when the trip does.

Dev Library — **Full-Stack + GenAI Platform** — React · Node.js · PostgreSQL · Google Gemini

- Cut internal resource-discovery time **~60%** with a Chrome extension + web platform using **Google Gemini** for semantic search and auto-tagging — deployed and used by the engineering team.

Open-Source & Selected Work —

- IndiaCN UI** — open-source React design system — 25+ WCAG 2.1 AA components on Radix UI + Tailwind v4, zero dependencies. indiacn.in
- Developer Tooling** — 3 published npm packages, incl. eslint-frontent-rules (17+ rules) and update-imports-with-path-alias (npx codemod), adopted team-wide.
- Accessibility Checker** — Chrome DevTools extension that flags keyboard-inaccessible handlers in live pages, with CSV export.

EDUCATION

B.Tech, Computer Science & Engineering

June 2024

Techno India NJR Institute of Technology · Udaipur, India · CGPA: 9.22 / 10.0

ACHIEVEMENTS

- Grand Finalist, Smart India Hackathon 2022** (national-level) — team lead and UI/UX designer for the prototype application.
- 3-Star on CodeChef** (s1eepyhead); **GDSC Competitive Programming Lead**, running events for 100+ students.