Roki Roy

Frontend Engineer (Next.js, 3D Web, High-Performance UI)

Portfolio • GitHub • LinkedIn

rokiroydev@gmail.com • +91 9800 881 300 • Siliguri, India

Summary

Frontend-focused engineer specializing in building high-performance, interactive web experiences using Next.js, React, and GSAP. Expert in crafting complex admin dashboards, immersive 3D web applications, and responsive e-commerce platforms. Deep understanding of modern CSS, animation libraries, and state management for scalable production applications.

Experience

Software Development Engineer (SDE 1) — Fordel Studios   Feb 2025 – Present
- Led frontend development for high-traffic web applications using Next.js and Tailwind CSS.
- integrated complex third-party APIs (Payment Gateways, Maps) into seamless UI flows.
- Optimized core web vitals and rendering performance, reducing LCP by 40%.
- Collaborated with designers to implement pixel-perfect, responsive UI components.

Full Stack Developer Intern — Fordel Studios   Aug 2024 – Jan 2025
- Built and deployed responsive frontend features for production e-commerce platforms.
- Refactored legacy React codebases to use modern hooks and state management patterns.

Key Projects

We Care Packages — Travel Agency Admin Panel
- Architected a comprehensive admin dashboard for managing travel packages, bookings, and user data.
- Implemented complex data grids with sorting, filtering, and bulk actions using React Table.
- Designed role-based access control (RBAC) and secure authentication flows.
- Stack: Next.js, Tailwind CSS, TypeScript, REST APIs

PathSathi — Immersive Travel Storytelling Platform
- Developed a scroll-driven storytelling experience for travel routes using GSAP and Lenis for smooth scrolling.
- Created interactive 3D map integrations and scroll-triggered animations to enhance user engagement.
- Optimized asset loading and animation performance for 60fps experiences on mobile devices.
- Stack: Next.js 14, GSAP, Framer Motion, Firebase, Tailwind CSS

The Formula Shop — Production E-commerce Platform
- Shipped a full-featured e-commerce platform with 300+ SKUs and dynamic cart management.
- Implemented client-side caching and optimistic UI updates for instant interactions.
- Achieved sub-2s page loads and 90+ Lighthouse performance scores.
- Stack: Next.js, Tailwind CSS, Redux Toolkit

Astra Terra Properties — Real Estate Platform
- Built a map-based real estate search engine with advanced filtering and dynamic clustering.
- Integrated Leaflet Maps with custom markers and GSAP transitions for property cards.
- Stack: Next.js, TypeScript, GSAP, Leaflet Maps

Vayuroom — Privacy-First WebRTC Video Platform
- Built a zero-knowledge, end-to-end encrypted video conferencing platform using WebRTC and DTLS-SRTP.
- Implemented ephemeral signaling via Firebase Realtime Database with no persistent storage of user data.
- Designed a custom mesh-network signaling protocol for small-group P2P calls without a central media server.
- Stack: React, WebRTC, Firebase, TypeScript, Cryptography (E2EE)

Wowfy — 3D Interactive Portfolio
- Designed and developed an immersive 3D portfolio website showcasing projects and skills.
- Utilized Three.js/React Three Fiber for interactive 3D elements and scene management.
- Stack: React, Three.js, React Three Fiber, Framer Motion

Technical Skills

Frontend Code: React.js, Next.js (App Router), TypeScript, JavaScript (ES6+), HTML5, CSS3
Styling & UI: Tailwind CSS, SCSS, Framer Motion, GSAP (ScrollTrigger), CSS Modules, Shadcn UI
State Management: Redux Toolkit, Zustand, React Context API
Tools & Performance: Webpack, Vite, Figma-to-Code, Responsive Design, Web Vitals Optimization
Backend Familiarity: Golang, Node.js, Firebase, REST APIs

Education

University of North Bengal — BCA   Expected May 2026