

Skills

Languages: JavaScript, TypeScript, Swift (Beginner), Kotlin (Beginner)

Frameworks: Catalyst (Creator), Next.js

Libraries: React, React Router, Vite, Webpack, Babel, SASS, HTML/CSS

DevOps Tools: Kubernetes, Docker, Grafana, Devtron, Kloudfuse, CI/CD

Specialties: Design Systems, Rendering Architectures, Core Web Vitals, Universal Frameworks.

Experience

Tata 1MG

Gurugram

Software Development Engineer 3

April 2024 - Present

- Designed and implemented a **Streaming SSR + Partial Prerendering architecture** in Catalyst Core using React Suspense and Dynamic Boundaries, **cutting TTFB by ~35%** and improving first paint consistency across SEO-critical routes.
- Refactored server-side **CSS caching architecture** from route-level to file-level caching, **reducing memory usage by 50–70%** and **cutting CSS-related file I/O by up to 98%** on warmup while improving scalability across shared routes.
- Architected and led Catalyst**, a universal framework unifying Web + Native, adopted across 5+ business verticals and used by more than 10M monthly users.
- Built an **AI-powered Design System Manager** automating asset pipelines and component publishing **reducing design-to-production time by 65%**.
- Migrated Catalyst from **Webpack** to **Vite**, introducing code-split utilities and critical asset extraction **reducing bundle size by 30%** and **dev cold-start from 120s to 3s**.
- Integrated **React Compiler** and **Parallel Data Fetching**, improving **INP by 30%**.
- Scaled Catalyst's native layer with native keyboard, launch screen, and app-config APIs — enabling **one-click cross-platform builds**.
- Mentored 6 engineers in performance profiling and system design.

Software Development Engineer 2

April 2022 - March 2024

- Built the **first production release of Catalyst** and migrated the mobile web platform onto it — **reduced deployment time by 60%** and improved runtime stability.
- Refactored homepage and product pages — **raised Core Web Vitals to > 80** and improved LCP by 40% and **reduced CLS to 0**.
- Implemented **Dynamic Rendering** for SEO-critical routes — **increased organic traffic by 28%**.
- Hardened security with **CSP directives** and automated linting
- Designed a reusable **Add-to-Cart Hook** powering 6 verticals — **cut duplicate logic by 45%**.

Software Development Engineer 1

January 2021 - March 2022

- Migrated critical pages to the new mobile architecture — **reduced load times by 40%**
- Introduced **Framer Motion transitions** improving session retention by 12%.
- Created the **first mobile-web design system**.

Consultant

October 2020 - December 2020

- Delivered Health Records MVP modules (Home, Overview, Prescriptions, Test Results) within 6 weeks.

Education

JSS Academy of Technical Education

B.Tech. in Computer Science

Noida

2016 - 2020