

# KUSHAL SAI SINGH

Senior Frontend Engineer | React.js | TypeScript | Redux | Next.js

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## PROFESSIONAL SUMMARY

Senior Frontend Engineer with 4.5+ years of experience delivering scalable, production-grade web applications using React.js, TypeScript, Redux, and Next.js. Proven track record of improving UI performance (75% build speed improvement via Vite migration; cold start reduced from ~45s to under 10s), architecting reusable component libraries, and shipping accessible, mobile-first interfaces. Experienced in fintech, payment, and SaaS product environments with deep expertise in performance optimization, SSR/SSG, Web Vitals, and testing (Jest, Playwright, React Testing Library). Strong collaborator in cross-functional Agile/Scrum teams with a focus on clean code, design systems, sprint planning, and developer productivity.

## SKILLS

**Core Stack:** React.js (4+ years), React Hooks, component lifecycle, Next.js (SSR/SSG), TypeScript, Redux Toolkit, Context API

**Styling:** Tailwind CSS, Material-UI, Bootstrap, CSS3, HTML5, design systems, design tokens

**Testing:** Jest, React Testing Library, Playwright, unit testing, integration testing, E2E testing

**Performance:** Web Vitals, code splitting, lazy loading, memoization, useMemo, useCallback, React.memo

**Build & CI/CD:** Vite, Webpack, Git, GitHub Actions, Bitbucket CI/CD

**Tools:** Figma (design handoff), GitHub Copilot, Storybook, VS Code, REST APIs, Jira

**Practices:** Agile/Scrum, sprint planning, code reviews, SOLID principles, accessibility (a11y), responsive design

**Domains:** Fintech, SaaS, Payment Platforms, Onboarding Tools

## WORK EXPERIENCE

### Senior Frontend Engineer | Coderower Software Pvt. Ltd.

Oct 2021 - Present | Remote, Hyderabad

- Led migration from Create React App to Vite - cutting full build time from ~4 min to under 1 min and cold start from ~45s to under 10s, boosting developer iteration speed by ~75% and reducing CI costs.
- Optimised Web Vitals (LCP, CLS, FID) across data-intensive screens using useMemo, useCallback, React Hooks, lazy loading, and code splitting, reducing unnecessary re-renders by ~40%.
- Designed and built the Demo Creation feature in Page Pilot from scratch using React component lifecycle patterns, enabling product exploration without registration and improving activation rates by ~25%.
- Architected reusable, modular UI component libraries and a shared design system with design tokens in React + TypeScript + Redux, cutting feature development effort by ~30% across 4 production applications.
- Built and maintained unit and integration test suites using Jest and React Testing Library, achieving 80%+ coverage on critical modules; authored end-to-end tests with Playwright.
- Implemented SSR and SSG patterns with Next.js to improve SEO performance and initial page load for content-heavy views.
- Integrated RESTful APIs and implemented scalable state management using Redux Toolkit and Context API, ensuring predictable data flow across 5+ production apps.
- Built fully responsive, mobile-first, accessible (a11y) interfaces using Material-UI, Tailwind CSS, and Figma handoffs - tested across 5+ browsers and all major device types.
- Collaborated cross-functionally with product managers, designers, and backend teams in Agile/Scrum sprints; contributed to CI/CD pipeline setup (GitHub Actions), led code reviews, enforced SOLID principles, and mentored 2 junior developers.

## KEY PROJECTS

### Page Pilot

React | Redux Toolkit | TypeScript | Next.js | Material-UI

SaaS platform for in-app onboarding tours, tooltips, banners, and feature adoption flows.

- Built a no-code UI configuration system that reduced engineering dependency for onboarding changes by ~60%, enabling product teams to ship independently.
- Implemented complex state management for multi-step interactive overlay flows using Redux Toolkit; optimised rendering using React Hooks and memoization to maintain less than 100ms response on interactive elements.
- Architected the Demo Creation feature with lazy-loaded component bundles, improving activation rates by ~25% and reducing initial bundle size by ~35%.

### **Addpay**

*React | Redux | TypeScript | Tailwind CSS*

Digital payment platform with real-time transaction tracking and secure payment processing.

- Developed real-time dashboards monitoring 1,200+ daily payment events with less than 2s data refresh latency using WebSocket integrations.
- Integrated third-party payment APIs with optimistic UI updates, reducing perceived transaction latency by ~30%.
- Achieved 85%+ unit test coverage on payment flow components using Jest and React Testing Library.

### **Payswish**

*React | Redux | Firebase | Tailwind CSS*

Online bill payment system for utilities and subscriptions.

- Built accessible, multi-step payment flows with form validation and error recovery, reducing drop-off rate by ~20%.
- Ensured reliable UI performance for high-frequency interactions via memoization, lazy loading, and Suspense boundaries.

### **CCMT**

*React | Redux | Firebase*

Cryptocurrency mining platform with referral system and live dashboards.

- Built real-time dashboards displaying live mining stats and referral metrics with Firebase listeners, supporting 500+ concurrent users.
- Designed a reusable Storybook component library for dynamic data displays, reducing UI bug reports by ~15%.

## **EDUCATION**

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**B.Tech - Mechanical Engineering | Chaitanya Engineering College (JNTU-K)**

Graduated 2022

## **CERTIFICATIONS**

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- Responsive Web Design - freeCodeCamp (2022)
- Frontend Libraries - freeCodeCamp (2022)