

# Krishna Agarwal

Frontend Engineer | Full-Stack Developer | Developer Tooling

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## TECHNICAL SKILLS

**Languages & Frontend:** JavaScript (ES2022+), TypeScript, React.js, Next.js, HTML5, CSS3, Redux, React Native

**Backend & Database:** Node.js, Express.js, PostgreSQL, MySQL, REST APIs, GraphQL (basic)

**Testing & Tools:** Cypress, Playwright, Jest, Git, Docker (basic), ESLint, Webpack, Vite, Chrome Extensions, DevTools APIs

**Concepts:** Web Accessibility (WCAG 2.1), Design Systems, Performance Optimization, CI/CD, Agile/Scrum

## PROFESSIONAL EXPERIENCE

**Frontend Engineer** | **Spark Eighteen** Udaipur, India • Sep 2023 – Present

- Decreased frontend bug escape rate by **50%** pre-deployment by architecting and owning the E2E test suite (Cypress + Playwright), integrated into the CI/CD pipeline.
- Improved page load time by **30%** and maintained Lighthouse scores above 90 by optimizing React rendering, code-splitting, and asset loading strategies.
- Reduced manual data-entry time by **~40%** for 350+ farmers by building React/TypeScript solutions for a Microsoft-backed agri-tech platform.
- Accelerated new feature delivery by **~25%** by designing a reusable component library and enforcing a company-wide design system.
- Eliminated import-path inconsistencies across the entire codebase by building and publishing **2 open-source npm/npx developer tools**, adopted by the engineering team.

**Frontend Developer Intern** | **Dizart Solutions** Udaipur, India • Dec 2022 – Apr 2023

- Improved mobile app reliability for **500+** users by integrating React Native frontend with Node.js/MySQL backend APIs, ensuring seamless real-time data flow.
- Enabled **scalable production deployment** by shipping a Node.js application and MySQL database to a cloud platform, achieving consistent uptime for the team.

## KEY PROJECTS

**Accessibility Checker** — Chrome DevTools Extension | JavaScript · DevTools API · MutationObserver | [github.com/krishnaagarwal1506/accessibility-prototype](https://github.com/krishnaagarwal1506/accessibility-prototype)

- Eliminated manual WCAG audits by building a Chrome DevTools extension that **auto-scans** live pages for keyboard-inaccessible click handlers, highlights violations in-page, and exports a CSV report.
- Achieved **zero main-thread blocking** by implementing batched DOM scanning with requestIdleCallback and MutationObserver for real-time re-scanning on DOM changes.

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

- Reduced internal resource discovery time by **~60%** by building a Chrome extension + web platform using Google Gemini for semantic search and intelligent auto-tagging of developer resources.
- Shipped a **fully typed end-to-end** stack — React/TypeScript frontend, Node.js/Express backend, PostgreSQL — deployed and actively used by the engineering team.

**Open Source Developer Tools** — 2 Published npm Packages | JavaScript · Node.js · AST · CLI

[eslint-frontent-rules](#) | [update-imports-with-path-alias](#)

- Enforced React/TypeScript/WCAG code standards team-wide via [eslint-frontent-rules](#) — a published ESLint plugin with **17+ configurable rules**, adopted across multiple repositories.
- Eliminated manual import refactoring with [update-imports-with-path-alias](#) — a **zero-install npx codemod** that reads tsconfig.json and rewrites all relative imports to path aliases across an entire codebase in one command.

## EDUCATION

**B.Tech, Computer Science & Engineering** | **Techno India NJR Institute of Technology** Udaipur, India • May 2023

CGPA: 9.22 / 10.0

## ACHIEVEMENTS

- Rated **3-Star** on CodeChef (handle: s1eepyhead) — consistent top performer in algorithmic programming contests.
- Led competitive programming events for **100+** students as GDSC 2022 Competitive Programming Lead, growing the coding community at college.