# Rahul Anand Nayanegali

Portfolio | nayanegali.rahul@gmail.com | 551-399-9002 | Linkedin | Github

### **SKILLS / CERTIFICATIONS**

**React Ecosystem**: React 18+, TypeScript, Next.js, Redux, Custom Hooks, Context API **Performance**: Core Web Vitals, Lazy Loading, Memoization, State Management **Component Architecture**: Reusable Patterns, Component Design, Design Systems

Styling: Tailwind CSS, Chakra UI, Material UI, CSS-in-JS, SCSS

**Build & Testing**: Vite, Webpack, ESBuild, Jest, React Testing Library, Storybook, TDD, **Vite**, Webpack, ESBuild **Browser Extensions**: Chrome Extension API, Content Scripts, Background Workers, Message Passing Patterns

AWS Certified Cloud Practitioner March 2022, Master JavaScript – LinkedIn Learning Oct 2023.

#### **EXPERIENCE**

Shoptaki, Senior Software Engineer, New York, NY

Aug 2024 - Present

- Implemented reusable component library with TypeScript, enabling faster development cycles and consistent UI across the application
- Architected and developed RESTful Node.js API services that seamlessly integrated with ArangoDB, supporting complex graph data relationships
- Implemented CI/CD pipeline with automated testing, ensuring code quality and facilitating rapid deployment to multiple environments

### Aquila Test AI, Software Engineer, Remote

July 2023 – Present

- Developed high-performance QA automation Chrome extension using React 18 and TypeScript, reducing workflow creation time by 95% (2 days to 20 minutes)
- Engineered intelligent DOM traversal system using memoization and custom hooks, automating XPath generation with near-perfect accuracy
- Implemented cross-context communication system between content scripts and UI components using message bus pattern, ensuring reliable state management
- Built responsive UI with Tailwind CSS and Chakra UI, utilizing lazy loading and performance optimizations for seamless user experience
- Established reusable component architecture with custom hooks and TypeScript patterns, reducing future feature development time by 60%
- Led complete product development from ideation to production, creating comprehensive documentation and development guidelines for the team

#### CodeCraft Technologies, Engineer, Web Development, Bangalore, India

February 2021 – January 2023.

- Led Next.js migration across multiple client projects, achieving 40% Core Web Vitals improvement and 50% reduction in Time to Interactive through SSR optimization
- Modernized legacy React codebase with webpack and babel upgrades, reducing build time by 50% and implementing automated testing that increased coverage to 90%
- Architected performant tree-based UI component library for workflow management, delivering 40% improved user engagement and 30% faster load times
- Designed and implemented debounced search functionality serving 200K users, reducing API calls by 70% and improving search performance by 30%
- Created technical training program for 30 developers focusing on React/TypeScript best practices, resulting in 60% quality improvement and 40% team productivity gain

### Tata Consultancy Services, Assistant Software Engineer, Bangalore, India

November 2018 - May 2020

Built real-time dashboard using React and SCSS with 99.9% uptime, serving 50K daily active users

#### **OPEN SOURCE CONTRIBUTIONS**

Univer (<u>dream-num/univer</u>) - Core Contributor

- Optimized critical React rendering performance in spreadsheet application's Ribbon component using useMemo and ResizeObserver, eliminating rendering bottlenecks
- Engineered solution for UI flickering issues affecting global user base, implementing advanced React optimization patterns
- Delivered production-grade performance improvements through collaborative development & rigorous code review process

## **PROJECTS**

Al-Based Common Thorax Disease Detector using X-Ray

July 2023 - May 2024

Technologies: PyTorch, React, Flask, CNN, ROC-AUC

• Designed and implemented a scalable system architecture integrating a deep learning CNN model with a React frontend and Flask backend, achieving 93% accuracy in X-ray image classification.

## **EDUCATION**

Pace University, Master of Science in CS | GPA: 4.0 / 4.0 | Computer Science Dept Award

Jan 2023 - May 2024, New York, NY