Harish Yerraguntla

Full-Stack Software Engineer, React/Next.js Specialist

New York, USA • +1 (205) 736-5808 • yerraguntlaharish98@gmail.com • GitHub: github.com/nandu064 •
LinkedIn: https://www.linkedin.com/in/harish-yerraguntla-70695416b/

SUMMARY

Full-stack software engineer with 5+ years specializing in React/Next.js and Vue.js frontend development with strong backend integration skills using Node.js and Python. Expert in building performant, scalable user interfaces and data visualization platforms.

- Built React and Vue.js applications serving 2M+ users with 99.9% uptime, achieving 90+ Lighthouse scores and <3-second load times
- Created reusable component libraries and design systems reducing team development time by 30-40% across multiple products
- Architected real-time data visualization dashboards using D3.js and Plotly with WebSocket/Kafka streaming Delivered 70% faster deployment cycles through automated CI/CD and 60% faster data processing through ETL optimization
- Led 18+ full-stack projects with strong emphasis on frontend performance, accessibility (WCAG), and modern React patterns
- Modernized legacy codebases to TypeScript with 90%+ test coverage, eliminating production defects
- Backend expertise: Node.js, Python (FastAPI/Django), GraphQL, PostgreSQL, MongoDB, Redis

Core Stack: React/Next.js, Vue.js, TypeScript, D3.js/Plotly, Node.js, Python (FastAPI/Django), GraphQL, WebSockets, Kafka, PostgreSQL, MongoDB, AWS/GCP, Docker

TECHNICAL SKILLS

Languages: JavaScript (ES6+), TypeScript, Python, SQL, HTML5, CSS3

Frontend: React.js, Next.js, Vue.js, Nuxt.js, React Native, Redux Toolkit, Vuex, Pinia, React Context API, Tailwind CSS, Material-UI, Vuetify, Bootstrap, Ant Design, Styled Components, Sass/SCSS, Responsive Design (CSS Grid, Flexbox)

Backend: Node.js, Express.js, Python (Django, Flask, FastAPI), GraphQL, Apollo Server, Kafka, RESTful APIs, WebSockets, Socket.io, JWT/OAuth 2.0, microservices

Databases & Caching: MongoDB, PostgreSQL, MySQL, Redis, DynamoDB, Firebase, Database Optimization, Indexing.

Cloud, DevOps & Tooling: AWS (EC2, Lambda, S3, RDS, CloudWatch), GCP, Docker, Kubernetes, CI/CD (GitHub Actions, GitLab CI), Jest, React Testing Library, Cypress, Git, GitHub, Lighthouse, Chrome DevTools, Storybook, Vite, webpack, npm, yarn

Data Engineering & Analytics: Python (pandas, SQLAlchemy), ETL Pipelines, Kafka Streaming, Data Processing & Transformation, Data Visualization (D3.js, Plotly)

PROFESSIONAL EXPERIENCE

Progress Solutions Inc., Texas (Remote)

Software Developer   January 2025 – Present

Promoted from Intern to Full-Time Developer in July 2025

- Architect React.js and Next.js applications with TypeScript, building reusable component libraries with custom hooks and design systems using Tailwind CSS/Material-UI that reduced development cycles by 40% and ensured consistent UX across web applications
- Develop real-time data visualization platforms using React with D3.js and Vue.js with Plotly, implementing WebSocket and Kafka streaming for live dashboard updates processing 1.6M+ data points with optimized rendering performance
- Implement advanced state management with Redux Toolkit and Pinia, integrating real-time features through WebSocket/Socket.io while leveraging Next.js SSR/SSG that improved SEO by 35% and reduced initial page loads to <3 seconds
- Lead TypeScript migration across legacy JavaScript codebases, establishing Jest and React Testing Library achieving 90%+ coverage with comprehensive component testing and CI/CD pipelines reducing deployment cycles by 70% BACKEND & INFRASTRUCTURE (30%)
- Build Python FastAPI and Node.js/Express.js microservices with GraphQL APIs (Apollo Server), implementing JWT/OAuth 2.0 authentication and integrating Kafka for event-driven data streaming with PostgreSQL/MongoDB and Redis caching, achieving sub-30ms response times
- Develop ETL pipelines using Python pandas/SQLAlchemy processing 1.6M+ records with 60% performance optimization, creating analytics endpoints consumed by React and Vue.js dashboards
- Deploy containerized applications on AWS (EC2, Lambda, S3, RDS) and GCP using Docker and Kubernetes with Infrastructure as Code (Terraform), achieving 25-40% performance improvements through code splitting and bundle optimization.

State University of New York, New Paltz, NY

Graduate Research Assistant – Frontend Engineer   January 2024 – December 2024

- Architected reusable React component library with TypeScript, custom hooks, and compound components used across multiple university platforms, improving UI consistency and reducing development time by 30%
- Built scalable React.js frontend applications with Redux state management and Apollo Client for GraphQL data fetching, integrating with Python Django/FastAPI backends and reducing unnecessary network requests by 40%
- Optimized React application performance, achieving a 45% reduction in initial page load times and 25% smaller bundle sizes through code splitting, lazy loading, and advanced memoization techniques (useMemo, useCallback, React.memo)
- Led backend migration from Node.js to Python Django/FastAPI with MongoDB, implementing JWT authentication middleware, rate limiting, and Redis caching that reduced API response times by 50%

- Developed Python data processing pipelines using pandas and SQLAlchemy, engineering MongoDB aggregation pipelines achieving 60% faster query responses for real-time dashboard data consumption
- Deployed full-stack services on GCP with Kubernetes for high availability and horizontal scaling, established CI/CD pipelines with GitHub Actions, and achieved 90%+ test coverage using Jest and React Testing Library
- Mentored 60+ students through comprehensive React.js workshops covering modern hooks, state management patterns (Redux/Context API), component architecture, and testing best practices, increasing project delivery success by 40%.

Harns Technologies Private LTD, India

React Developer   October 2021 – July 2023

- Delivered 14 production full-stack MERN applications (MongoDB, Express.js, React.js, Node.js) leading 4 major enterprise initiatives and single-handedly architecting 2 complete applications from requirements to deployment, serving 100K+ daily active users with 99.8% uptime
- Built real-time IoT data visualization platform using React.js with D3.js for interactive charts and dashboards, integrating WebSocket/Socket.io connections to process live sensor data streams from 500+ IoT devices with sub-second latency, implementing event-driven architecture with MongoDB and Redis caching for 60% performance boost
- Architected comprehensive e-paper digital publishing platforms for NBTGold, Maharashtra Gold, and Times using React.js frontends with Node.js/Express.js backends, consuming XML zoning data from print layout teams and transforming into interactive digital publications with real-time content updates serving 50K+ daily readers
- Developed enterprise CMS subscription platform with React.js frontend and Python Django/FastAPI backend, implementing Stripe/Razorpay payment gateway integrations processing 10K+ monthly transactions with JWT authentication, role-based access control, and automated email workflows using Celery and Redis
- Built scalable data processing pipelines using Python pandas and MongoDB aggregation framework for IoT sensor data processing 2M+ records daily, creating responsive React dashboards with D3.js visualizations for real-time monitoring and analytics
- Implemented comprehensive SEO optimization strategies using Schema.org structured data markup, achieving 150% improvement in organic search rankings, integrated analytics platforms (TimesPoints, CleverTap, Google Analytics) across 14 applications, and optimized Core Web Vitals, achieving 90+ Lighthouse scores
- Established technical standards and best practices across 14 projects, implementing Git workflows with code review processes, reusable React component libraries, and CI/CD deployment pipelines using GitHub Actions and Docker that reduced deployment time by 65% and improved code quality by 40%

QS Quaquarelli Symonds Private Limited | India

Frontend Developer   **December 2020 – July 2021**

- Architected 8+ production React SPAs for global education platform serving 15M+ annual visitors, building 50+ reusable components with TypeScript, custom hooks, and compound component patterns achieving WCAG 2.1 AA accessibility compliance and cross-device compatibility

- Optimized React application performance implementing advanced memoization techniques (useMemo, useCallback, React.memo) reducing unnecessary rerenders by 70% and API calls by 45% through React Query caching strategies with efficient data fetching patterns
- Built enterprise-scale state management architecture using Redux Toolkit and React Context API across 8 applications, creating predictable state flow, eliminating prop drilling in deeply nested component trees, and developing comprehensive design system with 50+ reusable components reducing development time by 40%
- Achieved exceptional Lighthouse performance scores 90+ (Performance: 92, Accessibility: 95, Best Practices: 93, SEO: 94) through advanced code splitting with React.lazy(), lazy loading strategies, and React.Suspense implementation, reducing bundle sizes by 55% and initial load times from 8s to 2.5s (69% improvement)
- Implemented responsive, mobile-first interfaces using CSS Grid, Flexbox, and Tailwind CSS with custom design tokens, created interactive data visualizations, and built complex form workflows with real-time validation ensuring seamless user experience across desktop, tablet, and mobile devices
- Established comprehensive CI/CD pipelines using GitHub Actions with automated Jest and React Testing Library testing, achieving 85%+ code coverage across all applications, while containerizing React applications with Docker using optimized multi-stage builds, reducing final image sizes by 60% and deployment times by 50%
- Set frontend architectural standards and best practices for React applications including component composition patterns, folder structure conventions, code splitting strategies, and performance optimization techniques, while leading code reviews focusing on React best practices and implementing Sentry error monitoring, achieving 99.5% error detection and real-time alerting

Haindavi Designer Studio, India

Frontend Developer (Freelancer)   **December** 2019 – November 2020

- Architected complete React e-commerce SPA using MERN stack (MongoDB, Express.js, React.js, Node.js) with 40+ reusable components, implementing virtual try-on features and real-time product customization with Canvas API for boutique fashion brand serving 5K+ monthly users across 15+ product categories
- Built interactive product customization interface with React and Ant Design featuring canvas manipulation and real-time preview, increasing customer engagement by 60%, custom order conversions by 45%, and average order value by 35% through enhanced user experience
- Implemented advanced state management architecture using Redux Toolkit and React Context API, managing complex e-commerce workflows including shopping cart persistence across sessions, multi-step customization with undo/redo functionality, real-time inventory tracking, and order status updates, processing 200+ monthly orders
- Achieved exceptional Lighthouse scores 92+ (Performance: 92, Accessibility: 94, SEO: 96) reducing page load times by 65% from 9s to 3.1s through strategic code splitting with React.lazy(), progressive image loading, and Core Web Vitals optimization (LCP: 2.1s, FID: 45ms, CLS: 0.08)
- Developed comprehensive design system using Ant Design with custom theme configurations and brand styling, creating 40+ reusable React components for product galleries with lazy-loaded images, interactive filters, checkout flows with form validation, and customer account dashboards
- Built responsive, mobile-first interfaces using CSS Grid and Flexbox with comprehensive SEO optimization including Schema.org Product markup and Open Graph tags, while integrating secure payment gateways (Stripe, PayPal, Razorpay) through Node.js backend endpoints with PCI compliance processing 2,500+ transactions

- Established complete DevOps workflow implementing Git version control, ESLint/Prettier for code quality, Jest and React Testing Library achieving 75% test coverage, and deployment automation using GitHub Actions and Docker maintaining 99.5% uptime and reducing bug reports by 80% post-launch

EDUCATION

Master of Science in Computer Science

State University of New York, New Paltz, NY   2023–2025

GPA: 3.81/4.0

Bachelor of Technology in Computer Science

Lovely Professional University, Punjab, India   2017–2021

GPA: 3.2/4.0