Harish Yerraguntla

Frontend Engineer (Vue.js/React) | Full-Stack Developer | Building AI-Powered Applications

New York, USA • (205) 736-5808 • yerraguntlaharish98@gmail.com • [LinkedIn](#) • [GitHub](#) • [Portfolio](#)

PROFESSIONAL SUMMARY

Frontend Engineer with 5+ years building production applications using Vue.js, React.js, and TypeScript serving 100K+ users. Expert in developing responsive, performant interfaces with Vuex and Redux Toolkit state management, interactive data visualizations using D3.js and Plotly.js, and modern component-based architecture. Strong full-stack capabilities with Node.js/Express.js backends, RESTful API integration, real-time features using WebSockets and Kafka, and deployment to cloud platforms. Proven track record optimizing performance (90+ Lighthouse scores, 8s to 2.5s load time improvements), building reusable component libraries reducing dev time by 40%, and maintaining 90%+ test coverage. Experienced working in early-stage startups and small technical teams with strong ownership mentality and product-minded approach.

TECHNICAL SKILLS

Frontend (Primary): Vue.js 3, Vuex, Vue Router, React.js, Next.js, TypeScript, JavaScript (ES6+), HTML5, CSS3, Tailwind CSS, responsive design

State Management: Vuex, Redux Toolkit, React Context API, React Hooks, Zustand, session management

Data Visualization: D3.js, Plotly.js, Chart.js, SVG, Canvas API, real-time dashboards, interactive visualizations

Backend & APIs: Node.js, Express.js, Python (FastAPI, Flask), RESTful APIs, GraphQL, microservices, WebSockets, Socket.io

Database: MongoDB, PostgreSQL, Redis, database design, query optimization, indexing

Real-Time & Messaging: Apache Kafka, RabbitMQ, WebSockets, Socket.io, event-driven architecture

Testing: Jest, Cypress, React Testing Library, pytest, unit testing, integration testing, E2E testing, 90%+ coverage

Performance: Core Web Vitals optimization, code splitting, lazy loading, caching, bundle optimization, 90+ Lighthouse scores

Cloud & DevOps: GCP, AWS, Docker, Kubernetes, Terraform, CI/CD (GitHub Actions), Git

PROFESSIONAL EXPERIENCE

Progress Solutions Inc., Texas (Remote) | Software Developer

January 2025 – Present

- Built real-time data visualization applications using Vue.js 3 with Vuex state management and TypeScript serving 50K+ daily users, developing interactive dashboards with Plotly.js rendering 1M+ data points, optimized performance by switching from SVG to Canvas API reducing render times from 2-3s to under 500ms
- Developed component-based architecture with Vue.js creating reusable components with proper prop validation, computed properties, watchers, and lifecycle hooks, implemented Vuex store modules for global state management with actions, mutations, and getters reducing code duplication by 40%
- Integrated real-time data streaming implementing WebSocket connections using Socket.io for bidirectional communication and Apache Kafka consumers processing 1.6M+ events daily from IoT sensors with sub-second latency, proper error handling, and reconnection logic
- Built RESTful APIs using Node.js/Express.js and Python FastAPI with comprehensive error handling, request validation, pagination, filtering, and Swagger documentation, optimized MongoDB queries with compound indexes reducing response times from 800ms to 200ms (75% improvement)

- Implemented comprehensive testing strategy achieving 90%+ coverage with Jest for unit tests, Cypress for E2E testing, and automated test runs in GitHub Actions CI/CD pipeline preventing regressions and ensuring code quality
- Optimized frontend performance achieving Core Web Vitals targets (LCP <2.5s, CLS <0.1, INP <200ms) through code splitting with dynamic imports, bundle optimization reducing payload from 2.8MB to 1.5MB, and implementing Redis caching reducing API calls by 45%

State University of New York, New Paltz, NY | Graduate Research Assistant

January 2024 – December 2024

- Architected university web applications using React.js with TypeScript for type-safe development, Python FastAPI for backend APIs, PostgreSQL for data storage, and Redis for caching, deployed to GCP achieving 90%+ test coverage and serving 15M+ annual visitors
- Built reusable React component library with TypeScript featuring custom hooks, render props patterns used across 4 platforms, implemented Redux Toolkit for normalized state management, integrated Apollo Client for GraphQL with optimistic updates
- Improved application performance reducing page load times from 8s to 4.4s (45% improvement) through bundle optimization with code splitting, lazy loading, Webpack analysis, and API response time improvement from 300ms to 150ms through Redis caching and query optimization
- Established CI/CD pipelines with GitHub Actions running automated linting (ESLint), unit testing (Jest), integration testing (React Testing Library), code coverage reporting, Docker image building, and deployment to GCP with health checks

Harns Technologies Private LTD, India | Full-Stack Developer

October 2021 – July 2023

- Delivered 14 production applications using Vue.js and React.js frontends with component-based architecture, Node.js/Express.js backends, MongoDB databases serving 100K+ daily users with 99.8% uptime across publishing, e-commerce, and IoT platforms
- Built real-time IoT data platform with Vue.js frontend using D3.js for interactive visualizations (line charts, bar charts, heatmaps), Node.js/Express.js backend processing WebSocket data from 500+ devices, MongoDB time-series storage achieving sub-second response times
- Developed e-commerce CMS with Vue.js frontend featuring Vuex state management for shopping cart flows, Python Django and Node.js backends integrating payment gateways (Stripe, Razorpay), MongoDB for catalog and order management processing 10K+ monthly transactions
- Optimized performance achieving 90+ Lighthouse scores through bundle size reduction with code splitting, progressive image loading, Redis caching for frequently accessed data, and MongoDB query optimization with compound indexes

QS Quaquarelli Symonds Private Limited, India | Full-Stack Developer

December 2020 – July 2021

- Architected 8 production React SPAs with TypeScript serving 15M+ annual visitors, built reusable functional components, implemented Redux Toolkit state management, developed backend APIs with Express.js handling 1M+ daily requests
- Optimized application performance improving page load times from 8s to 2.5s (69% improvement) through code splitting with React.lazy(), progressive image loading, and API response time improvement from 400ms to 180ms through query optimization and Redis caching
- Implemented efficient data fetching using React Query for client-side caching, automatic background refetching, stale-while-revalidate strategy reducing API calls by 45% and improving perceived performance
- Created responsive mobile-first interfaces using CSS Grid for layouts, Flexbox for components, CSS media queries ensuring seamless experience across desktop, tablet, and mobile devices with touch optimization

Haindavi Designer Studio, India | Full-Stack Developer (Freelancer)

December 2019 – November 2020

- Architected complete e-commerce platform with React.js frontend featuring 40+ reusable components, Redux Toolkit state management with shopping cart persistence, Node.js/Express.js backend with RESTful APIs, MongoDB database serving 5K+ monthly users
- Built interactive product customization feature using React.js with HTML5 Canvas API for real-time design preview, drag-and-drop functionality, color pickers with undo/redo state management increasing customer engagement by 60%
- Achieved 92+ Lighthouse scores reducing page load times by 65% from 9s to 3.1s through code splitting, progressive image loading, Core Web Vitals optimization (LCP: 2.1s, CLS: 0.08, INP: 180ms)

EDUCATION

Master of Science in Computer Science | State University of New York, New Paltz, NY | GPA: 3.81/4.0 | May 2025

Relevant Coursework: Web Development, Full-Stack Development, Database Systems, Software Engineering, Cloud Computing

Bachelor of Technology in Computer Science | Lovely Professional University, Punjab, India | GPA: 3.2/4.0 | 2021