HARISH YERRAGUNTLA

Full Stack Engineer
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Full-stack engineer with 5 years building scalable web applications from React/Next.js frontends to Node.js/Python (FastAPI) backends. Experience delivering systems serving 50,000+ daily users, processing 1M+ events daily, and deploying to AWS with Docker and Kubernetes. Work includes microservices architecture, real-time data systems with WebSockets and Kafka, RESTful/GraphQL API design, and database optimization. Experienced across frontend and backend systems with strong ownership of user-facing architecture and API design. Looking for full-stack roles emphasizing scalable systems and end-to-end ownership.

TECHNICAL SKILLS

Frontend: React.js, Next.js (SSR, SSG), Vue.js, TypeScript, Redux, Tailwind CSS
Backend: Node.js, Express.js, Python (FastAPI, Django), RESTful APIs, GraphQL, WebSockets
Databases: PostgreSQL, MongoDB, Redis
Infrastructure: AWS (Lambda, ECS, S3), Docker, Kubernetes, CI/CD
Tools: Git, Jest, Cypress, Storybook, Kafka

EXPERIENCE

Senior Software Developer | Progress Solutions Inc. | Remote

January 2025 – Present

- Led decomposition of monolithic application into microservices using Node.js and Python FastAPI, defining service boundaries based on domain ownership and scaling patterns; implemented health checks, graceful degradation strategies, and horizontal pod autoscaling (HPA) enabling independent deployment for 50,000+ daily active users with 99.9% uptime
- Built Next.js frontend with SSR/SSG and backend APIs using Node.js and Python FastAPI, optimizing API performance by implementing Redis caching, idempotency keys for safe retries, request timeouts, and query optimization reducing P95 latency from 800ms to 220ms (72% improvement)
- Implemented real-time features using WebSocket.io and Kafka message queues handling 200-500 events/minute, designed event-driven architecture with circuit breaker patterns, proper error handling and exponential backoff retry logic to prevent cascade failures
- Developed React component library with 50+ TypeScript components and Storybook documentation adopted by 3 teams, designed API contracts balancing frontend usability with backend flexibility
- Established Docker and Kubernetes (EKS) deployment pipeline with Jenkins CI/CD and automated testing achieving 90% coverage, reducing deployment time by 65% while improving reliability
- Optimized PostgreSQL database queries and added proper indexing reducing query execution time by 60% for dashboard endpoints, collaborated with backend team on schema design

Software Developer | State University of New York | New Paltz, NY

January 2024 – December 2024

- Led backend migration from Node.js to Python FastAPI for platform serving 10,000+ users, profiling showed async I/O would improve performance; migration reduced API response times by 50% through better async handling and SQLAlchemy ORM optimization
- Designed PostgreSQL database schemas with proper relationships, constraints, and indexes for optimal query performance, thinking through access patterns upfront to avoid issues at scale
- Built Vue.js frontend applications consuming REST and GraphQL APIs using Axios and Apollo Client, implemented proper state management with Pinia and error handling with loading states
- Implemented OAuth 2.0 authentication with Auth0 and Okta integration for secure session management and role-based access control across 4 university platforms
- Deployed containerized applications on AWS using Docker, ECS for orchestration, and GitHub Actions for CI/CD with automated testing (Jest, Playwright), reducing deployment time from 45 minutes to 12 minutes
- Wrote comprehensive tests for frontend (Jest, React Testing Library) and backend (pytest) achieving 85% coverage, focusing on critical user paths rather than 100% coverage

Software Developer | Harns Technologies | India

August 2021 – July 2023

- Built e-commerce platform with Next.js frontend (SSG/ISR) and Node.js backend microservices for orders, payments, and inventory management, reducing Time to Interactive from 8s to 2.1s (74% improvement) and increasing conversion rates by 18%
- Developed real-time IoT dashboard with React frontend and Node.js backend processing data from 500+ sensors at 50+ updates/second using WebSocket connections, optimized rendering from 150ms to 45ms per update
- Contributed to microservices architecture migration from monolith, defining service boundaries for domain-driven services and implementing event-driven communication with message queues
- Designed MongoDB schemas with proper indexes and relationships, implemented Redis caching layer reducing database load by 60% during peak traffic
- Integrated Stripe and PayPal payment APIs with proper webhook verification, idempotency handling, and error recovery, processing 10,000+ monthly transactions with 99.5% success rate
- Created React component library with Storybook and Redux state management patterns used across multiple applications, reducing frontend development time by 35%

Software Developer | QS Quaquarelli Symonds | India

December 2020 – July 2021

- Developed React SPAs with TypeScript consuming GraphQL APIs using Apollo Client with normalized caching and optimistic updates, reducing redundant network requests by 40%
- Optimized application performance for platform serving 15M annual visitors, reducing bundle sizes from 4.2MB to 1.9MB (55% reduction) and page load times from 8s to 2.5s
- Achieved Core Web Vitals compliance (LCP: 2.1s, FID: 45ms, CLS: 0.08) and 90+ Lighthouse scores through systematic performance optimization
- Implemented WCAG 2.1 AA accessibility across 20+ page templates including semantic HTML, keyboard navigation, and screen reader compatibility achieving 100% accessibility score
- Built Storybook component library with 30+ documented React components establishing consistent UI patterns across engineering team
- Established testing standards with Jest and React Testing Library achieving 85% code coverage integrated into CI/CD pipeline

EDUCATION

Master of Science in Computer Science | State University of New York, New Paltz | GPA: 3.81/4.0 | May 2024

Bachelor of Technology in Computer Science | Lovely Professional University, India | 2021