VAMSHI KRISHNA

Web Developer | MERN Stack Developer

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Senior Frontend Engineer with 5+ years of MERN Stack experience, delivering 20+ scalable web apps with up to 35% performance gains across travel, finance, and enterprise domains. Improved UI/UX and API performance by resolving 300+ issues, cutting bounce rates by 23%, response times by 28%, and production incidents by 20%. Driven by growth and continuous learning, with a deep interest in AI, LLMs, classification models, and ML tools shaping next-gen web experiences.

PROFESSIONAL SUMMARY

- Built dynamic SPAs with ReactJS, TypeScript, and JavaScript, improving load performance by 23% and user engagement by 17% through optimized rendering.
- Developed secure RESTful APIs using Node js and Express.JS, with MongoDB and PostgreSQL, reducing query latency by 28% through schema tuning and indexing.
- Delivered responsive, accessible UIs with Tailwind CSS, Bootstrap, cutting layout bugs by 35% and ensuring WCAG compliance across
 devices
- Optimized production builds using modern JS toolsets ES6+, Webpack, Babel, Vite, and NPM, reducing bundle sizes by 27% and improving
 first-load UX.
- Integrated internal and third-party APIs, improving feature reliability and cutting integration time by 22% with structured error handling and async optimization.
- Boosted sprint velocity by 19% through contributions to Git workflows, code reviews, and active participation in Agile events using GitHub
 and following DevOps principles.
- Experience with containerization and orchestration (such as Docker, Kubernetes) and DevOps tools (such as Git, Ansible, Jenkins), along
 with monitoring/logging contributing to a 31% faster deployment cycle and reduced downtime.
- Skilled in handling asynchronous operations and streamlining debugging using tools like **Chrome DevTools** and **Cursor**, ensuring smooth data flow and faster issue resolution.

TECHNICAL SKILLS

Programming Languages & Runtime: JAVASCIPRT (ES6+) | TypeScript | Tailwind CSS | NodeJS

 Framework and Libraries:
 ReactJS | NextJS | Bootstrap

 Database:
 MongoDB | PostgreSQL | SQL

 State Management:
 Redux | Context API | NgRx | Rx js

Cloud & CI/CD: AWS | Kubernetes

Version Control: Git | GitHub | Bitbucket

Web Services & APIs: RESTful APIs | JSON | Apigee

Al & Intelligent Interfaces: LLM-aware UI design | Chatbot Interfaces | Al-integrated APIs

Web Standards & Architecture: Single Page Applications (SPAs) | MVC Architecture.

PROFESSIONAL EXPERIENCE

TCT Holidays and Technologies Private Limited | Hyderabad, India

Software Development Engineer SDE I

April 2021 – Aug 2023

- Developed and maintained dynamic React-based web applications in the Travel, Tourism, and Finance sectors using front-end technologies like react, JavaScript, **Typescript** and **Bootstrap**, resulting in a **25% increase in operational efficiency** and improved platform usability.
- Engineered scalable backend services and APIs with **NodeJS**, facilitating **real-time synchronization** between client UIs and backend systems for financial transactions and booking engines.
- Integrated RESTful APIs and fine-tuned SQL queries to support live dashboards and transactional systems, leading to 40% faster data rendering and a 20% reduction in latency-related issues.
- Leveraged React-based features like Hooks (useState, useEffect, useContext) to refactor state logic and streamline components, cutting rework cycles by 30% and improving maintainability across codebases.
- Partnered with designers in Figma to implement accessible, responsive UIs using Tailwind CSS, resulting in 100% WCAG 2.1 AA compliance
 and seamless cross-device compatibility.
- Excellent **debugging skills** and an eye for **performance optimization**, demonstrated by optimizing SPA architecture, implementing lazy loading and route guards, which led to a **30–40% decrease in initial load times** and noticeably smoother navigation.
- Applied front-end testing methodologies and contributed in a fast-paced, startup-style environment, where rapid iteration, crossfunctional ownership, and scalability were key drivers of delivery.
- Built and maintained robust unit testing and integration tests leading to 85%+ code coverage and early detection of regressions across
 critical workflows.

Junior Software Developer

Jan 2019 - Mar 2023

- Collaborated with UI/UX senior developers to build and maintain internal platforms like TCT Holidays and Tralamo, using JavaScript and Bootstrap contributing to core features and stability improvements.
- Led bug fixes and implemented new features, resulting in a 20% drop in reported issues and significantly improving the reliability and satisfaction of internal stakeholders.
- Engaged in **Agile software engineering** practices, including sprint planning, daily standups, code reviews, and **Jira-based tracking supporting** faster delivery cycles and higher cross-team alignment.
- Improved responsive layouts using Bootstrap **achieving consistent UX** across mobile, tablet, and desktop devices, and reducing layout-related user complaints.

Engineer Trainee Level 3 Internship - CYIENT Limited | Hyderabad, India

Jan 2016 - Aug 2017

- Designed high-fidelity test **component models** for complex aerospace systems ensuring robust integration into **live production** environments using advanced simulation and modeling tools.
- Worked cross-functionally with engineers, testers, and product leads to iterate on designs, resolve integration blockers, and implement
 process improvements that enhanced test cycle velocity and system safety compliance.

WEB PROJECTS SUMMARY

Stock Brokerage Platform - Finance & Technology Industry

Tech Stack: ReactJS, nodejs, Express.js, MongoDB, REST APIs, WebSockets, JWT, AWS EC2 & S3

- Designed and developed a full-stack stock trading web application simulating a real-time brokerage platform.
- Implemented secure user authentication, dynamic dashboards, real-time stock updates using WebSockets, and portfolio analytics.
- Focused on scalability, latency reduction, and efficient data fetching for high-volume user interactions.
- Honed skills in REST API integration, authentication (JWT), session management, and responsive UI design.
- Deployed on AWS EC2 with S3 for document uploads and CloudWatch for basic monitoring.

Video Conferencing App – Zoom Clone for Collaboration

Tech Stack: react, webRTC, Node, js, Socket.io, Express, MongoDB

- Engineered a web-based video call platform with group calling, screen sharing, and real-time chat features.
- Integrated WebRTC for peer-to-peer audio/video communication, Socket.io for signaling and messaging.
- Focused on low-latency connections, real-time room creation and joining, and session persistence.
- Explored integration of Al-powered features (e.g., transcription, smart captions) using Web APIs and LLM-based tools for enhanced collaboration.
- Built authentication flow and user room history tracker.

Cloud Migration & CI/CD Automation

Tech Stack: AWS (EC2, S3, RDS), Kubernetes, Jenkins, Docker, Git, YAML, Linux

- Led the cloud migration of York University's Student Learning Management System (LMS) from on-premise servers to AWS Cloud, improving system scalability, uptime, and disaster recovery readiness.
- Deployed cloud-native infrastructure using EC2 for compute, S3 for storage, and RDS for persistent data layers, following security best practices (IAM, VPC, etc.)
- Implemented Kubernetes-native CI/CD pipelines via Jenkins and Docker, automating build, test, and deployment processes across multiple dev/staging/production environments.

EDUCATION

George Brown College - Toronto, ON, Canada

May 2024 – Jan 2025

Post Graduation in Project Management - CGPA | 3.60

York University - Toronto, ON, Canada

Sep 2023 - May 2024

Post Graduation in computer science - CloudOps - CGPA \mid 3.75

Jawaharlal Nehru Technological University, Hyderabad, India

Bachelor's Degree - CGPA | 3.02

Aug 2012 - July 2016

SOFT SKILLS

Project Management & Collaboration Process & Methodology Client Deliverables, collaboration, strong communication, code reviews.

Agile, Scrum, Continuous Development, Continuous Improvement, DevSecOps, ,

WCAG Compliance, Jira, technical documentation, Shift Left Testing, DRY.

CERTIFICATIONS

- MERN Stack Apna college
- JavaScript Algorithms and Data Structures Udemy
- Mastering ReactJS, NodeJS Udemy

INTENSIVE COMPETITIVE PREPARATION AND TRANSFERABLE SKILLS

- Demonstrated discipline, resilience, and adaptability during Indian Civil Services UPSC CSE Examination (2018-2023), often thoughted as a globally recognized rigorous competitive exam.
- Developed analytical thinking and the ability to manage vast amounts of information under pressure, directly transferable to technical problem-solving.
- Cultivated effective time-management and communication skills, essential for cross-functional teams and technical roles in Computer Science, Software Engineering roles.