

Vamsi Krishna Kolla

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SKILLS

- **Languages & Frameworks:** JavaScript, TypeScript, Node.js, Express, React, Redux, Redux Toolkit, RTK Query, Tailwind CSS, Bootstrap, Java, Spring Boot, Python, HTML, CSS
- **Databases & ORMs:** MongoDB, Mongoose, Prisma, PostgreSQL, Redis
- **Tools & Platforms:** AWS (EC2, S3), Docker, Docker Compose, Nginx, RabbitMQ, Kafka, WebSockets
- **Concepts:** Microservices, Event-Driven Architecture, RESTful APIs, System Design, Load Balancing, Security, Unit Testing, CI/CD, Caching, Logging, Scripting (Bash), Linux, Server Deployments
- **Soft Skills:** Communication, Leadership, Time Management, Problem Solving, Teamwork, Creativity
- **Operating Systems:** Linux, Windows

WORK EXPERIENCE

Full Stack Developer

Jan 2023 – Present

Jayeesha Software Private Limited | Nizampet, Hyderabad

- Developed and deployed scalable, high-performance backend applications using **Node.js**, adhering to **SOLID principles** and **advanced design patterns** to ensure maintainability and efficiency.
- Architected secure, **event-driven microservices** leveraging **RabbitMQ** and **Kafka** to enable seamless, decoupled communication across services, driving high availability and fault tolerance.
- Implemented **round-robin load balancing** strategies to manage heavy traffic, enhancing system reliability and user experience.
- Leveraged **React** and **Redux Toolkit** on the frontend to build responsive, optimized user interfaces, reducing bundle sizes and improving performance through **code-splitting** and **lazy loading**.
- Achieved modular, scalable frontend architecture by applying best practices in **component design** and **state management**, fostering a seamless user experience.
- Built and optimized **RESTful APIs** ensuring efficient data retrieval and enabling rapid frontend integration.
- Integrated comprehensive **error handling** and **logging mechanisms** to monitor, diagnose, and proactively resolve issues in real time.
- Designed and implemented **security best practices** across the backend, including **data encryption**, **rate limiting**, and **input validation**, protecting applications against common vulnerabilities.
- Decreased server response time by optimizing **database queries** and utilizing **caching mechanisms** like **Redis**, enhancing application performance under high load.

PROJECTS

Practice Management(Dentals)

- Developed a comprehensive Practice Management System for dental clinics, streamlining operations with key features such as patient management, treatment planning, and appointment scheduling. Leveraged microservices and event-driven architecture using RabbitMQ and Redis for seamless integration across modules and efficient communication between services.
- Implemented advanced functionalities like prescription and pharmacy integration, periodontal charting, and financial tracking, alongside clinic reporting and customizable dental tools. The system optimized patient care and clinic efficiency through real-time updates and automated workflows.

Technologies Used: Node Js, Express, React, MongoDB, RabbitMq, Aws EC2..

Roles & Responsibilities:

- Led the Backend Team to architect, develop, and implement the Practice Management System, establishing scalable backend solutions and ensuring alignment with clinical workflows and user requirements.

Inventory Management

- Designed a real-time inventory management system with automated product categorization, consumption tracking, and notifications using WebSockets, enhancing operational efficiency and ensuring timely replenishment and maintenance. Integrated product-specific thresholds, expiration dates, and facility-specific configurations for optimal inventory control.
- Developed a comprehensive dashboard to monitor inventory status and facility-specific operations, providing real-time analytics on product consumption and automated order management. Integrated SendGrid for email notifications on expirations, missing items, and maintenance scheduling.

Technologies Used: Node Js, Express, React, Firebase, Websockets, MongoDB, Aws EC2..

Roles & Responsibilities:

- **Developed a real-time inventory management system** with automated categorization, consumption tracking, and WebSocket notifications, boosting operational efficiency and timely stock replenishment.

School Management (MobileArq)

- Built a school management platform enhancing parent-student engagement with features like multi-user registration, activity tracking, group creation, and centralized news reporting. Integrated e-commerce and payment gateways for school fees and supply purchases using Node.js, React, MongoDB, and AWS EC2.
- Developed a mobile app for parents to manage registrations, track activities, and make purchases, while incorporating district and super admin roles for streamlined school management and oversight.

Technologies Used: Node Js, Express, React, MongoDB, Aws EC2..

CERTIFICATIONS

Full Stack MERN Developer (ccbp.in)

100xDevs Cohort (100xdevs.com)

EDUCATION

BTech (CSE) – *Computer Science*

June 2018 – Sep 2022

Kakinada Institute of Engineering & Technology

Intermediate

July 2016 – Mar 2018

Sri Ravi Junior College

SSC

May 2015 – Mar 2016

Sri Ravi Junior College