PRATHYU PRASAD PK

Full Stack Developer | 2 Years of Experience

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Summary

A full-stack web developer with **2 years of experience** in building scalable healthcare solutions from the ground up. Expertise in backend development using Node.js, microservices architecture, and AWS. Skilled in React.js, TypeScript, and delivering efficient, robust applications in fast-paced environments.

Skills

Back-end: Typescript, Node.js Microservices, Amazon Web Services (EC2, ECR, S3), Docker, Nginx, RabbitMQ

Front-end: Angular, React, TypeScript, Redux, Thunk

Databases: PostgreSQL, MongoDB, Redis

Tools / Platforms: Git/GitHub

Others: RESTful API, Responsive Design, Problem Solving, Communication, Teamwork

Work Experience

Neos HealthTech

Remote
Aug 2022 - Nov 2024

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 Improved radiologists' efficiency through the development of Flow, a cloud-based application designed to provide radiologists with essential

- tools and Al assistance, streamlining workflows and improving diagnostic accuracy.
- Played a key role in building the project from scratch, collaborating with a team of four to design scalable architecture and implement core features
- Gained expertise in radiology workflows and medical imaging standards (DICOM, DICOMweb).
- Designed and implemented 1 microservices using **Node.js**, **TypeScript**, **and MongoDB**, ensuring scalability and performance. Worked on other 4 microservices utilizing **PostgreSQL**, optimizing database operations for specific use cases.
- Maintained effective code structure, reducing complexity by 20% through OOP component refactoring.
- Developed and maintained secure **RESTful** APIs using access and refresh token-based authentication for seamless communication between microservices and frontend applications."
- Implemented WebSocket protocol to enable real-time tracking of user status, improving system responsiveness and enhancing user experience.
- Enhanced inter-service communication efficiency by 30% through RabbitMQ migration from REST to asynchronous messaging.
- Developed an Al-powered bot to automate medical report generation, streamlining the diagnostic process.
- Utilized Docker to containerize applications, streamlining development and deployment processes. Reduced AWS ECR costs by 50% by optimizing Docker images
- Led the design and implementation of a task management feature that allows assigners to allocate patient studies to radiologists, streamlining workflows and enhancing productivity.
- Customized the OHIF DICOM Viewer (React-based open-source project) to meet specific product requirements.
- Gained hands-on experience with on-premise deployment of cloud architecture, acquiring in-depth knowledge of networking and the critical role of **Nginx as a reverse proxy**.
- Collaborated with diverse teams to develop and deploy efficient solutions.

Projects

MockMentor (LINK)

A modern and intuitive solution designed to help you practice and improve interview skills through realistic AI conversations with smart feedback

Tech Stack: Next.js, Firebase, Tailwind CSS, Vapi Al, shadon/ui, Google Gemini Key Features:

- Auth via Firebase (Email/Password), Voice-based interview creation & feedback, Real-time AI conversation with transcripts
- Modern, responsive UI with dashboard

To-Do Al Agent (LINK)

Developed an Al-powered to-do list assistant that enables users to manage tasks through natural language interactions. The assistant follows a structured approach—START, PLAN, ACTION, OBSERVATION, and OUTPUT—to process user queries and perform actions such as creating, searching, retrieving, and deleting tasks from a database.

- Tech Stack: Node.js, Drizzle ORM, PostgreSQL, OpenAl API, JavaScript
- Key Features: Natural language processing for task management Structured AI reasoning with automated planning and execution Database operations using Drizzle ORM Interactive command-line interface

Mini Social Media App (LINK)

A full-stack MERN-based social media platform with essential user engagement features.

- Features: User authentication (email/Google), post creation/editing, like/dislike functionality.
- Tech Stack: Node.js, Express, MongoDB, React, Redux, Material-UI.

Education