

Nischal K Shaj

Full Stack Developer

Bengaluru, India | nischalkshaj5@gmail.com | +91 9544291856 | Portfolio | LinkedIn
GitHub | Leetcode

Profile Summary

Backend-focused Full-Stack Developer with hands-on experience building production APIs using Node.js, Express/NestJS, and PostgreSQL. Experienced in performance optimization, real-time systems, and deployment using Docker and CI/CD. Actively seeking backend or full-stack roles.

Experience

- Backend Developer at Scita Solutions Dec 2024 – Present
 - Engineered backend APIs in Node.js/Express with PostgreSQL, improving request performance by 30%.
 - Designed JWT-based authentication and centralized validation/error-handling middleware for production APIs.
 - Optimized SQL joins and indexes to enhance reporting dashboards.
 - Assisted in deploying backend services to client environments and resolving deployment issues.
 - Coordinated with product and frontend teams for feature delivery and API integration.

Technical Skills

- Languages: TypeScript, JavaScript
- Frontend: React, Next.js, Tailwind CSS
- Backend: Node.js, Express, REST APIs, Authentication (JWT), WebSockets (Socket.IO)
- Infrastructure: Docker, CI/CD, NPM, Nginx, PM2, Load Balancing
- Databases: MongoDB, PostgreSQL
- Integrations: Razorpay, Multer, PayPal, Firebase, Nodemailer
- Deployment: EC2, GitHub Actions, Render, Vercel
- Computational Skills: Data Structures And Algorithms, System Designs

Projects

Scita ATMS – Advanced Traffic Management System

- Developed a full-scale ATMS platform aligned with **NHAI ATMS 2023 guidelines**, improving highway surveillance, enforcement, and operator response.
- Integrated ANPR, VIDS, overspeed detection, incident logging, VMS control.
- Delivered real-time alerts, live device monitoring, configurable workflows, enforcement evidence, and analytics dashboards for operational decisions.
- Implemented a reporting system for each functional module, generating downloadable reports and evidence archives using **PDFKit**.
- Tech: Node.js, Express.js, PostgreSQL, Socket.IO, PM2, PDFKit

Code Sprint – E-Learning Platform

Frontend GitHub
Backend GitHub

- Built and deployed an end-to-end programming and competitive coding platform with live courses and learning modules.
- Integrated multiple payment gateways, subscription tiers, coding problem levels, remote code execution, and real-time chat using Socket.IO.

- Created an admin dashboard for **user analytics, instructor metrics, question statistics, plagiarism checks, and code testing.**
- Implemented CI/CD pipelines and containerized deployment on AWS using NGINX and Docker.
- Tech: **Node.js, Express.js, MongoDB, React.js, Next.js, REST API, Nodemailer, S3, Multer, NGINX, AWS, Docker, Socket.IO, GitHub Actions (CI/CD)**

Education

MERN Stack Development

2023 - 2024

Brototype, Trivandrum

B.Sc Cyber Forensic

2020 - 2023

School of Technology and Applied Science, Pathanamthitta, Kerala

CGPA: 7.61