

Venkatesh Madanwale

EXPERIENCE SUMMARY

Experience Level: 4 months

Software Engineer I

Miraфра Software Technologies Private Limited, April 2025 - Present

EDUCATION

B.Tech. in Electronics and Telecommunication Engineering

(Honors in Artificial Intelligence and Machine Learning) 84.59%

Walchand Institute of Technology, Solapur

TECHNICAL SKILLS

- **Programming Languages:** JavaScript, TypeScript, Python
 - **Frontend Technologies:** HTML, CSS, Bootstrap, MUI, ReactJS, VueJS
 - **Backend Technologies:** ExpressJS, NestJS, NodeJS
 - **Database Management:** SQL, MongoDB
 - **Tools:** JIRA, Figma, Git, GitHub
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PROJECTS

Smart Recruitment with Integrated Proctoring System

Software Engineer I - Miraфра Software Technologies Private Limited

Description:

Led the development of a full-stack online test portal with integrated proctoring (webcam), MCQ and coding assessments, and role-based access (**Super Admin, Technical Manager, Talent**

Acquisition): Oversaw sprint planning, backlog grooming, and team coordination using Agile Scrum practices in Jira.

NestJS - Backend (Monolithic Architecture)

- Developed secure REST APIs with JWT auth, role-based access, and test flow control (MCQ → Coding).
- Integrated PostgreSQL via TypeORM for managing users, questions, sessions, and logs.
- **Tools:** Passport JWT, bcrypt, multer, nodemailer, class-validator

ReactJS - Frontend (Candidate & Admin Portals)

- Developed modular UIs for candidate tests and admin dashboards with React Router.
- Implemented webcam/mic prompts, full-screen enforcement, and developed and integrated a coding platform embedding.
- **Tools:** Axios, Toastify, Monaco Editor

Python - Proctoring Module

- Implemented facial and audio detection for real-time proctoring using **Python, OpenCV**, and face recognition libraries.
- Triggered alerts for suspicious activity or absence.

PostgreSQL - Database Management

- Designed and managed schemas for users, roles, tests, results, and proctoring logs.
- **Tools:** PGAdmin

Project Management & DevOps

- Led sprint planning, reviews, and retrospectives using **Jira**.
- Managed Agile Scrum ceremonies via Jira: sprint planning, daily standups, and retrospectives.
- Version control and collaboration are managed via **GitHub**.

E-Commerce Platform

Software Engineer I - MiraFra Software Technologies Private Limited

Description:

Built a scalable e-commerce platform using microservices with **NestJS**, **ReactJS** for users, and **Vue.js** for admin. Designed secure APIs, responsive UIs, and real-time dashboards.

NestJS - Microservices

- Developed services (Auth, Cart, Products, Payment, etc.) with TCP-based inter-service communication and a centralized API Gateway.
- Implemented JWT auth, role-based access, and DTO validation.
- **Tools:** Passport JWT, bcrypt, multer, nodemailer

ReactJS - User Application

- Modular TypeScript-based UI with Redux Toolkit for state management.
- Features: user auth, product browsing, cart, and payments.
- **Tools:** React Router, Redux, Tailwind CSS, Toastify

VueJS - Admin Dashboard

- Built a dashboard for product/user management with data visualizations.
 - Used Pinia for state, REST API integration via custom services.
 - **Tools:** Vue Router, Pinia, Tailwind CSS, Chart.js
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Hospital Management System

Software Engineer Trainee - Vector India

Description:

A comprehensive healthcare web application built to streamline hospital operations for patients, doctors, and insurers, ensuring secure data access and efficient workflows.

ReactJS - User Application

- Developed an admin dashboard tailored for doctors to manage appointments and view patient records.
- Integrated appointment booking, billing view, and payment workflows.
- Enhanced user experience through **reusable UI** components and clean, responsive design.

ExpressJS - Backend

- Developed **RESTful APIs** to support role-based access control and secure operations.
- Created REST APIs with JWT-based role authentication (patients, doctors, insurers).
- Enabled secure data retrieval and downloads for insurers.

Database & Security (MongoDB, JWT, Encryption)

- Designed schemas for users and appointments with encrypted sensitive data.
 - Enforced strict role-based access and ensured data integrity.
 - Ensured access isolation and data integrity with strict role-based permissions.
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CERTIFICATION

- Full Stack Development Course (MERN stack) - **Vector India**
 - **Python for Finance:** Investment Fundamentals & Data Analytics - **Udemy**
 - Prompt Engineering For Generative AI - **LinkedIn Learning**
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LANGUAGES

English, Marathi, Hindi