Internship Report

MERN Stack Internship

(90 Days)

Submitted by

Aaron K.C.

Organization

Sriyog Consulting Pvt Ltd.

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Acknowledgement

I would like to express my sincere gratitude to Sriyog Consulting Pvt Ltd for providing me with the opportunity to complete my internship. I am thankful to my mentors and team members for their continuous guidance, encouragement, and technical support throughout the internship period. Their feedback and support played a major role in helping me complete this project successfully.

Abstract

This report presents the work and learning outcomes of a 90-day MERN Stack internship completed at Sriyog Consulting Pvt Ltd. The internship focused on developing a full-stack web application named *RamroCV*, which serves both job seekers and recruiters. The platform allows users to create professional resumes while enabling recruiters to browse and filter candidates based on specific requirements such as city, expected salary, and minimum experience. Throughout the internship, I worked on frontend and backend development, database integration, API handling, and image upload functionality. This experience strengthened my understanding of scalable application development and real-world software engineering practices.

Contents

1. Introduction

The internship was carried out at Sriyog Consulting Pvt Ltd for a duration of 90 days as part of the MERN Stack training program. The primary goal of the internship was to gain hands-on experience by working on a real-world application. During this period, I contributed to the development of a resume management platform called *RamroCV*. The system is designed to support both resume creation for job seekers and resume viewing for recruiters, making the platform useful from both perspectives.

2. Organization Overview

Sriyog Consulting Pvt Ltd is a technology-focused organization that emphasizes practical learning and real-world problem solving. The company provides opportunities to work on production-oriented applications that follow modern development practices. RamroCV is one such platform developed to simplify resume creation and candidate discovery through a structured and user-friendly system.

3. Objectives of Internship

The objectives of the internship were:

- To gain practical experience in full-stack web development.

- To design and implement a resume creation and resume viewing platform.

- To allow recruiters to filter candidates based on city, salary, and experience.

- To understand backend API design and frontend integration.

- To improve debugging, optimization, and problem-solving skills.

4.   Tools and Technologies Used

The tools and technologies used during the internship are listed below.

- Frontend: React.js, Tailwind CSS

- State and API Handling: React Query

- Rich Text Editing: TipTap

- Backend: Node.js, Express.js

- Database: MongoDB

- File Upload and Storage: Multer, Cloudinary

- Development Tools: Git, Vite

5. Work Done

During the internship, I worked on the RamroCV project, a full-stack platform designed for both job seekers and recruiters. The system allows users to create professional resumes and enables recruiters to browse and view candidate profiles based on specific requirements.

On the frontend, I developed reusable and responsive components using React to ensure a smooth and consistent user experience. Rich text editing functionality was implemented using TipTap, allowing users to format resume content such as summaries and descriptions. React Query was used to manage API communication, handle loading and error states, and keep the interface synchronized with backend data.

Filtering functionality was implemented primarily on the frontend to allow recruiters to narrow down candidates based on expected salary and minimum experience. City-based filtering was handled on the backend to ensure accurate and efficient data retrieval. Care was taken to structure the filtering logic clearly so that performance and readability were maintained even as the page handled multiple responsibilities.

On the backend, I worked with Express and MongoDB to design schemas and implement CRUD operations for resume-related data. Image upload functionality was implemented using Multer, and images were securely stored using Cloudinary to avoid local file storage. Environment variables and CORS configurations were properly managed to ensure secure and stable communication between frontend and backend services.

Throughout development, I actively debugged issues, improved performance, and ensured smooth integration between different parts of the system. This experience helped me strengthen my understanding of full-stack architecture, frontend optimization, and real-world application workflows.

6.   Challenges and Solutions

One of the major challenges during development was managing and optimizing a large single-page interface that handled resume creation with different CV templates. Handling image uploads was also a challenge, as profile images needed to be uploaded, stored securely, and retrieved efficiently. This was resolved by using Multer to process image uploads and Cloudinary to store and serve images securely, with configuration values managed through environment variables. Debugging asynchronous API behavior and maintaining consistent state updates were handled using React Query, which improved reliability and reduced complexity.

7. Learning Outcomes

Through this internship, I gained strong practical knowledge of full-stack web development using the MERN stack. I learned how to design systems that support multiple user roles, implement frontend and backend filtering logic, manage cloud-based file storage, and build scalable APIs. The experience also improved my debugging skills, understanding of application performance, and confidence in developing real-world software solutions.

8. Conclusion

The 90-day internship at Sriyog Consulting Pvt Ltd was a valuable and enriching experience. Working on the RamroCV platform allowed me to understand how resume creation and candidate discovery systems operate in real-world applications. The internship strengthened my technical foundation, improved my problem-solving abilities, and prepared me for future opportunities in full-stack web development.