

AI Resume Builder – HireMate

Abstract

This project focuses on developing an AI-powered Resume Builder as the first phase of HireMate. The system leverages modern web technologies and AI integration to generate professional resumes dynamical It addresses the problem of creating tailored, well-structured resumes efficiently.

Introduction

HireMate is a web-based application designed to simplify recruitment processes. In the first phase, the focus was solely on the Resume Builder with AI integration.

The application enables users to input details, and the AI assists in formatting and refining resumes ,ensuring professional standards. Unlike manual resume creation, this system automates content suggestions and formatting, providing users with a polished resume quickly.

Tools Used

1. Frontend: React.js with
2. Tailwind CSS for responsive UI.
3. Backend: Node.js and Express.js for handling server-side logic.
4. Database (optional for phase-1): MongoDB (not fully integrated yet).
5. AI Integration: Hugging Face APIs for generating smart suggestions and formatting.(OpenAI isn't working)
6. Other Tools: GitHub for version control, VS Code for development.

Steps Involved in Building the Project

1. Designed the project structure and decided on the tech stack.
2. Created the frontend using React and styled components with Tailwind CSS.
3. Built backend endpoints using Node.js and Express.js.
4. Integrated AI APIs to generate resume text and suggestions dynamically.
5. Connected frontend with backend to handle user input and deliver resume outputs.
6. Tested the flow end-to-end and ensured resume download/export worked smoothly.

Conclusion

The AI Resume Builder successfully demonstrates how artificial intelligence can assist job seekers in building high-quality resumes quickly .Though limited to resume generation for now, the project lays the groundwork for extending into recruitment management, interview scheduling, and candidate–employer matching in later phases.

System Flowchart

