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Developing an Artificial Intelligence- Driven Resume Builder with a Feedback System: Enhancing Career prospects in the Digital Age

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ABSTRACT

Artificial Intelligence is now become a large concept in which everyone depends on it to do their work. By using it, we can simply finish our application within the prescribed time. Ai Resume Builder with Feedback System is an application of AI in which students and professionals can build their resumes effectively by giving their details to the system. The main objective is to make the students to get shortlisted for multiple companies. Compared to traditional methods, it is very beneficial to the students. Although there are online tools like Word to create their own resumes, there are not ATS- friendly. Most of the companies now using ATS (Applicant Tracking System) to shortlist the resumes of students. Ai Resume Builder is the one which generates the resume that can pass ATS.

Key Words: *Applicant Tracking System (ATS), Artificial Intelligence (AI), Resume Optimization, Recruitment Technology, Automated Resume Generation.*

INTRODUCTION

In today's competitive job market, a well- crafted resume is essential for getting noticed by employers. However, most job seekers still rely on manual resume writing or basic online templates. To address these issues, the AI Resume Builder with Feedback System offers a smarter, faster, and more effective approach. Using advanced AI algorithms, it automatically generates resumes that match the job description and are ATS-friendly. The system provides real-time feedback on structure, keywords, and presentation, allowing candidates to improve instantly. With this technology, users can create professional, tailored resumes in minutes, get suggestions to highlight their strengths, and ensure their profiles pass recruiter screening systems. This not only saves time but also significantly increases the chances

of reaching the interview stage. The AI Resume Builder with Feedback System bridges the gap between job seekers and recruiters by evaluation — making resume creation easier, smarter, and more impactful.

LITERATURE SURVEY

Recent years we have use the word to create our resumes. In that we have done many research to create resumes easily. Nowadays company are using ATS friendly application. Here some authors are used ai to create a resume. In that our first research is Smith J in this paper they talk about the future of job applications using the ai in resume building of journal career development. we go to another research Chen L& wang are building ai-powered resume optimization for enhanced employability international journal of human resource management. Finally, we go to another paper Gracia M &Rodriguez are used the evolving role of applicant tracking systems and ai in recruitment journal of employment studies.

RELATED WORK

Online platforms like NoVo resume, Kick resume, and Zetia offer resume templates and customization options. While they provide professional designs, they often lack continuous real-time feedback and deep AI- driven personalization. Some research prototypes and modern tools integrate AI APIs (e.g., Cohere AI, GPT models) for generating tailored resumes. These systems also experiment with multiple download formats, responsive layouts, and live previews, but very few combine all these features into one comprehensive platform. This platform provides real- time feedback and optimization suggestions ensuring each resume is tailored to specific job description. Users can choose from professional templates, improve content quality through grammar and keyword analysis, and enhance visibility for applicant tracking system.

EXISTING SYSTEM

In the existing method resume creation is generally done manually by job seekers using traditional tools such as Microsoft word, google docs, or basic online templates users have to enter all personal, educational, and professional details on their own and then format the content to match industry standards this process is often

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time consuming, inconsistent, and lacks optimization for specific job roles. Users must also manually check grammar, structure and keyword relevance for applicant tracking system furthermore, traditional resume builders do not provide real- time feedback or intelligent suggestions-based job descriptions or recruiter preferences. As a result, many resumes fail to highlight the applicant's strengths effectively or align with the specific job requirements, overall, this, saves time to improves resume quality, and increases the chances of selection by intelligently tailoring resumes to employer expectations.

PROPOSED SYSTEM

A proposed system is an AI-powered Resume Builder with Feedback System designed to simplify and enhance the process of resume creation. It utilizes Cohere AI to generate professional, industry specific, and ATS-friendly resumes tailored to job descriptions provided by the user. The platform integrates a real-time feedback mechanism that evaluates the resume for content accuracy, formatting, keyword optimization, and ATS compliance. The system will feature professional templates, live previews, multiple download formats (PDF & text), and a responsive design that ensures smooth usage across desktop, tablet, and mobile devices. By automating content generation and providing intelligent suggestions, it aims to reduce the time, effort, and skill needed to create a competitive resume. This project presents an intelligent resume generation platform that applies artificial intelligence to create customized job-specific resumes while integrating a real-time feedback system for quality enhancement

SYSTEM ARCHITECTURE

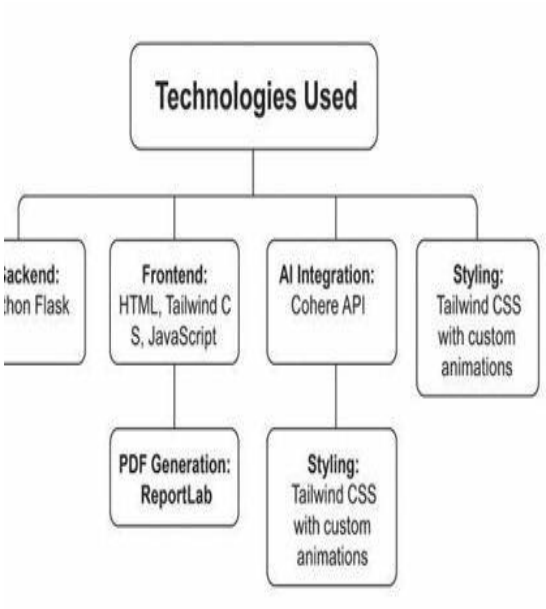

Fig:1 Technologies Used

METHODOLOGY DESCRIPTION

Technical-Feasibility: The system is technically feasible as it uses readily available technologies such as HTML, CSS, JavaScript for the front-end, and Cohere AI API for content generation. Cloud-based storage solutions and modern frameworks ensure scalability, while responsive design principles make it accessible across devices.

Operational-Feasibility: From a user's perspective, the system is easy to operate due to its intuitive interface and automated generation process. No prior design or resume-writing expertise is required. The feedback system guides users step-by-step,
making it suitable for students, professionals, and job seekers of all levels.

Economic-Feasibility: The cost of implementation is minimal as it relies on existing APIs, open-source libraries, and web technologies. For end users, the system eliminates the expense of professional resume writing services, making it a cost- effective alternative while maintaining high quality.

RESULTS AND DISCUSSION

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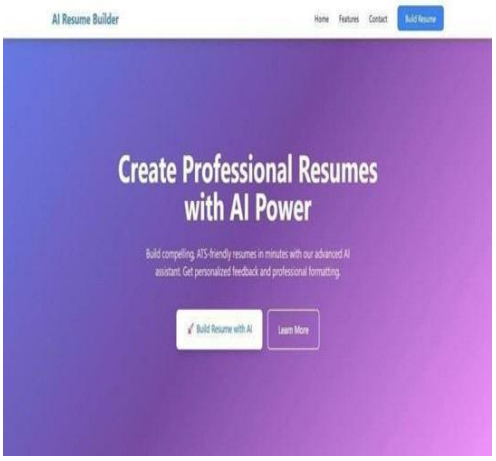

Fig :2 Home page of AI Resume Builder

The Home Page of the AI Resume Builder serves as the primary interface for users to create professional resumes effortlessly. It features a clean and intuitive layout, guiding users to input personal details, educational qualifications, skills, and work experience.

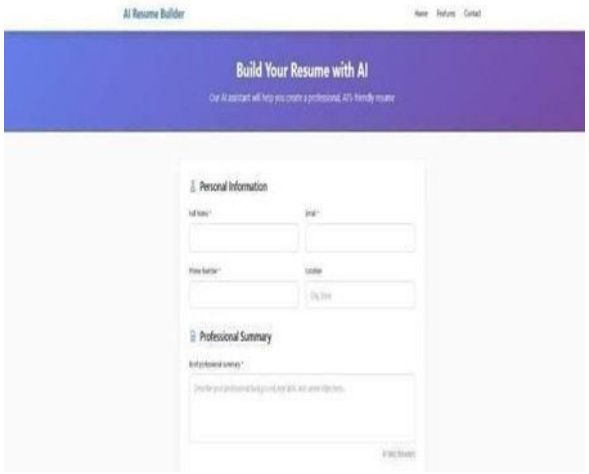

Fig :3 Input Details

The User Input Page allows users to enter all essential personal and professional information required for a complete resume. Fields are provided for name, contact details, email, education, skills, certifications, achievements, and work experience.

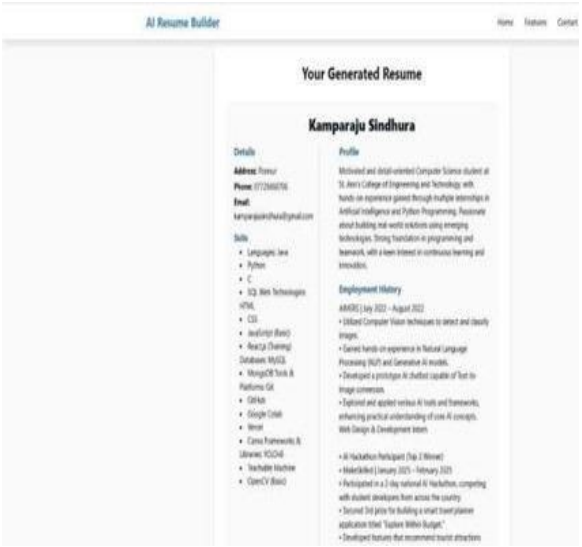

Fig 4: Generated Resume

The Generated Resume is a professionally formatted document created using the information provided by the user. The AI system organizes content into clear sections such as personal details, education, skills, certifications, achievements, and work experience.

CONCLUSION

The development of an AI-driven resume builder with an integrated feedback system demonstrates a modern approach to enhancing the job application process. By leveraging artificial intelligence and a responsive web framework, the system successfully simplifies resume creation while ensuring ATS (Applicant Tracking System) compatibility. It empowers users to craft professional, optimized resumes with intelligent suggestions and real-time feedback. The combination of HTML, Tailwind CSS, and Python Flask ensures a scalable, efficient, and user-friendly platform that bridges the gap between job seekers and employers through technology- driven personalization.

FUTURE SCOPE

In the future, the system can be enhanced with several advanced features to further improve user experience and effectiveness. The integration of AI-based job matching will enable the platform to align user resumes with suitable job openings automatically, helping candidates identify opportunities that best fit their skills and experience. The inclusion of NLP-based interview preparation tools and automated cover letter generation can assist users in presenting themselves more effectively during the recruitment process. Additionally, implementing cloud-based resume storage and multi-language support will make the system globally accessible and user-friendly. Seamless integration with LinkedIn APIs and other recruitment platforms can enable automatic profile synchronization, enhancing visibility for job seekers. Furthermore, the addition of AI analytics dashboards will allow users to track their resume performance and job response statistics. Collectively, these enhancements will transform the platform into a comprehensive career assistance ecosystem, empowering users with complete job readiness and long-term professional growth support.

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