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Drive Resume: Customized Web Application for Attractive CV Creation Using AI

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ABSTRACT

This paper provides Job seekers need effective tools to create, manage, and distribute professional resumes in the current digital era. The Drive Resume Builder is an online tool that integrates with Google Drive to make resume creation and storage easier. Utilizing React.js for front-end development, Node.js with Express for back-end processing, Firebase for authentication, and Google Drive API for smooth document storage and retrieval, this project makes use of these technologies. With the help of the system's numerous editable resume templates, users can enter their information in a dynamic form, view changes instantly, and export their resumes in DOCX and PDF formats. One important feature is the integration with Google Drive, which makes it simple for users to store, retrieve, and manage resume versions. Furthermore, safe user access is guaranteed by Google OAuth authentication. The platform might have AI-powered features to improve usability.

1. Introduction

The job market today is highly dynamic and competitive, requiring job seekers to craft resumes that not only showcase their qualifications but also meet the criteria set by automated hiring systems. Many organizations use Applicant Tracking Systems (ATS) to filter and rank job applications, making it imperative for candidates to structure

their resumes in an ATS-compatible manner. However, manually optimizing a resume for different job applications is both time-consuming and complex. Traditional resume screening methods rely heavily on recruiters spending hours reviewing applications, which is inefficient given the increasing volume of applicants for each job posting. This creates a gap where qualified

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candidates may be overlooked due to improper formatting, missing keywords, or lack of alignment with the job description. Addressing these challenges requires an AI-powered system that automates resume analysis, ensuring alignment with job postings while enhancing the efficiency of the recruitment process.

Many companies use Applicant Tracking Systems (ATS) to filter resumes based on keyword relevance, skills, and job descriptions. This study presents an AI- powered resume analysis system that enhances ATS compatibility, improves job relevance, and increases job seekers' chances of securing interviews.

2. PROSPECTIVE APPLICATION

Target Audience Recruiters, HR specialists, students, and job seekers. Demand in the Market and Issues Resolved integrates Google Drive to make resume creation and updates easier.

AI-powered recommendations enhance the calibre of resumes. Templates that are quick, shareable, and customizable.

Important Qualities & Distinction Direct editing and storage on Google Drive.

AI-powered keyword optimization and formatting. One-click PDF export and ready-to-use templates.

Possible Uses in Industry EdTech & Universities:

Student career services: Automated screening of resumes by recruitment agencies. Platforms for freelancers: Gig workers can create resumes.

Corporate HR: Management of employee resumes. An advantage over competitor's special Google Drive integration.

AI-driven improvements to improve job matching **AI-Powered:** Like Resume Analyser our model aims to help job seekers optimize their resumes for Applicant Tracking Systems (ATS) and increase their chances of getting hired by using AI-driven resume analysis and job matching techniques.

A. ATS Resume Optimization

Many companies use Applicant Tracking Systems (ATS) to filter resumes. Our models help job seekers optimize their resumes to pass ATS screening by Extracts keywords & skills from job descriptions. Compares them with the resume to identify missing keywords. Suggests resume improvement for better ATS compatibility.

B. Improving Job Match & Relevance

Helps job seekers customize their resumes for specific Job applications. Provides tailored recommendations to improve job relevance.

Example:

If a job description requires Python, or mobile app developer and AWS, but the resume only has

Python and AI, the system will recommend adding app dev and AWS projects or certifications.

Real-World Impact of Our Model

Helps job seekers get more interview calls by optimizing resumes. Creating more enhanced resume

Improves ATS pass rates by ensuring resumes have the right keywords.

User-Friendly & Interactive UI: Build a clean, interactive, and user-friendly web interface using Streamlit. Implement smooth animations, loading effects, and a responsive layout.

Real-Time Resume Analysis: Our system instantly analyses resumes, extracts skills, and compares them with job descriptions. It saves recruiters from manually going through resumes and gives job seekers quick in sightson improving their resumes. If a resume is missing important skills like Python or AWS for a data science job, our system will highlight that instantly.

Reducing Job Seekers' Time: Instead of job seekers spending hours modifying resumes for each job, our system does it insecondsIt gives instant feedback on missing keywords, skills, and ATS compatibility, so job seekers can quickly improve their resumes.

Improving Accuracy in Candidate-Job: Enhancing Resume Efficiency: We ensure resumes are structured well, ATS-friendly, and easy to read. It improves resume visibility in company hiring systems and helps candidates highlight their strengths better. If a resume has long, unstructured paragraphs, our system suggests bullet points for clarity and ATS optimization.

3. WORKFLOW OF SYSTEM

This section covers the architectural design, database schema, UI/UX wireframes, and performance calculations for the Drive Resume Builder project. The following is a flowchart for a project and its outlines the step-by-step process for users to create a resume using the application. Enhances hiring efficiency, and improves jobseekers' chances of securing interviews. User Registration/Login: The user starts by either registering or logging in to the system.

Input Resume Details: Users enter their personal details, work experience, education, skills, etc.

Select Template: The user selects a predefined resume template.

Customize Resume: The user customizes the resume layout, fonts, sections, etc.

AI Suggestions: The system provides AI-based suggestions to improve the resume.

Apply Suggestions: Users can apply AI-generated improvements.

Preview & Edit: The user reviews the resume and makes final edits.

Export & Share: The final resume is ready to be downloaded or shared.

The project simplifies resume creation, making it easier for users to stand out in competitive job markets. It also hints at possible future enhancements, such as advanced AI suggestions and LinkedIn integration

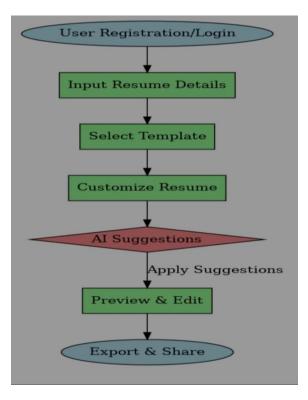


Figure 1: Flowchart of Proposed System

4. EMPERICAL ANALYSIS AND RESULT

Increased Effectiveness in Recruiting: By automating resume creating using given templates screening, the system helps recruiters save time and effort in case of manual formatting it is less dependent on manual procedures.

Reliable Candidate-Job Matching: The system efficiently matches resumes to job descriptions by utilising AI resume suggestions. The approach highlights a candidate's fit for a given role by providing a percentage match score.

Instantaneous Feedback and Suggestions: The application provides job searchers with immediate suggestions for resume keyword optimisation and skill enhancement.

Scalable and Customisable Design: The system may be tailored to meet the needs of various industries, job categories, and hiring processes such as applicant tracking systems and job portals is part of it.

Better Candidate Experience: Jobseekers get tailored career path advice and job recommendations. By giving resumes useful feedback, the system increases user engagement.

5. CHALLENGES AND FUTURE SCOPE

Multi-Format Resume Processing:

Increasing accessibility for a wider range of consumers by extending support beyond PDFs to include resumes in DOCX, TXT, and picture formats.

Multilingual Resume Analysis: Using models to process resumes in several languages makes the system suitable for international (hiring). Personalised job recommendations based on candidates own profile

Date abilities, career trajectory: The market trends are provided via an advanced job recommendation system that integrates deep learning models.

Creating an AI-powered interview assistant that offers automated practice interviews, response feedback, and personality tests is known as AI-Driven Interview Coaching.

Integration with Recruitment Platforms: Facilitating smooth communication with corporate applicant tracking systems, indeed, LinkedIn, and other platforms so that job searchers may submit applications straight through the system.

Real-Time Labour Market Analysis: By using AI to examine hiring patterns in the industry, job seekers can better match their resumes to employers' demands and new talents.

Voice and Chat-bot Support: Presenting conversational AI bots to assist users interactively with job application and resume optimisation procedure

CONCLUSION

For professionals, job seekers, and students who require quick and simple resume management, this chapter offers a dependable cloud-based resume-building platform. The Drive Resume Builder effectively offers a user-friendly, effective, cloud-integrated solution for creating and storing resumes. The system enables users to easily store, edit, retrieve, and share resumes by utilizing the Google Drive API. High performance, scalability, and security are guaranteed by using React.js for the front end, Node.js for the back end, and Firebase Fire store for database administration.

The Drive Resume Builder is intended to give users a smooth, easy-to-use, and effective way to create, modify, store, retrieve, and distribute resumes straight from Google Drive. Through the integration of the Google Drive API, users can easily manage their resumes without being constrained by local storage.

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