

# Ai Resume Analyzer

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**Abstract**— AI Resume Analyzer is an artificial intelligence-based system that analyzes candidates' CVs and makes recommendations to improve them. The system takes the candidate's resume as input and processes it using machine learning algorithms to identify opportunities for improvement. The main goal of the system is to help job seekers create resumes that will successfully pass the interview selection process. To extract useful information from a candidate's resume, the system uses various approaches such as natural language processing, text mining and sentiment analysis. Review the candidate's experience, skills, education, and achievements to get feedback to improve their resume. The algorithm also evaluates your resume's layout, language, and spelling to determine whether it meets industry standards. job seekers and recruiters can use the intelligent resume parser. Recruiters can use the system to quickly find the best candidates for a specific position, and job seekers can use it to create resumes that are more likely to pass the selection process at interviews. Job seekers can increase their chances of getting hired in a selected position by using a smart resume analyzer.

**Keywords**— Analytics, AI, ML, CV, Parsing, NLP

## I. INTRODUCTION

In the trendy fantastically aggressive job market, job seekers face the daunting task of standing out among hundreds, if not thousands, of different applicants. One of the most vital aspects of a successful job search is a well-crafted resume. However, creating a resume that precisely represents one's skills, experience, and skills can be a difficult task. Additionally, resumes that fail to skip the screening technique of job interviews often result in job seekers being eradicated from consideration, regardless of their true qualifications. To tackle this challenge, a progressive answer has been developed – the Intelligent Resume Analyzer. This machine makes use of synthetic brain (AI) and computer mastering algorithms to analyze resumes and supply comments on how to enhance them. The Intelligent Resume Analyzer is designed to assist job seekers create resumes that are greater possibly to ignore the screening procedure of job interviews. For example, the system may suggest that a candidate rephrase their work

trip in a extra concise and impactful manner. Alternatively, it may additionally suggest that a candidate highlight their applicable competencies greater prominently. These pointers can help job seekers create resumes that precisely represent their skills and increase their probabilities of getting hired. Overall, the Intelligent Resume Analyzer is a powerful tool that can assist job seekers create resumes that stand out in the modern day particularly competitive job market. By leveraging the power of AI and machine learning, the machine presents personalized feedback that can assist job seekers enhance their resumes and enlarge their chances of success.

## II. LITERATURE SURVEY

	Authors Of Paper	Title of the Paper	Proposed Methodology	Positive Points	Discussion
1	D.Celik et al.	Towards an Information Extraction system based on ontology to match resumes and jobs	Ontology based resume parser for finding Resume	Plain text resume into ontology form by Ontology Knowledge Base(OKB)	System calculates percentage completeness. depend upon work experience, education etc. %
2	F.Javed et al.	Caroten: A Job Classification System for Online Recruitment Domain	Caroten: Classification system for Online Recruitment Method	Job title classification by Caroten architecture by SVM-KNN Method	Used SVM and KNN Method in Caroten architecture %

Tab.2.1 Literature survey

### III . METHODOLOGY

The methodology employed in crafting the Intelligent Resume Analyzer system encompasses several pivotal stages throughout its development and implementation. This section aims to elucidate the intricacies of the research design, data collection, and analysis methodologies integral to the Intelligent Resume Analyzer system.

- **Research Design:** - The foundational research design for the Intelligent Resume Analyzer system adheres to the principles of machine learning and natural language processing. This approach involves the meticulous collection and analysis of an extensive corpus of resumes to discern crucial patterns and features crucial for effective resume screening. The system's construction adopts a supervised learning approach, utilizing annotated resumes to train the system in recognizing specific patterns.
- **Data Collection:** - The data collection process for the Intelligent Resume Analyzer system spans various sources, including job portals, social media platforms, and other online repositories. Resumes are acquired in diverse formats such as PDF, MS Word, and plain text files. Subsequent preprocessing ensures the removal of extraneous information, safeguarding personal identification details.
- **Data Analysis:** - The data analysis phase entails several key steps. Initially, preprocessed resumes undergo analysis using natural language processing techniques to extract pertinent features such as skills, education, experience, and achievements. Subsequently, machine learning algorithms scrutinize the extracted features, identifying patterns conducive to predicting a resume's suitability for a specific job. The system is rigorously tested on an extensive resume corpus to assess its performance and pinpoint areas for refinement.
- **Evaluation:** - The evaluation process gauges the system's efficacy using a set of annotated resumes as a test dataset. These resumes are categorized based on their suitability for distinct job positions. The system undergoes assessment based on its accuracy in predicting the suitability of a resume for a given job position. The results of the evaluation showcase the system's commendable accuracy in predicting resume suitability for diverse job positions. In conclusion, the methodology section of the Intelligent Resume Analyzer system undergoes a meticulous process involving rigorous research design, comprehensive data collection, and sophisticated analysis procedures. Leveraging machine learning and natural language processing, the system adeptly analyzes resumes, offering

constructive feedback for enhancement. Evaluation results affirm the system's high accuracy in predicting resume suitability across various job positions.

### IV . ANALYSIS AND MODEL TESTING

The Intelligent Resume Analyzer system heavily relies on sophisticated modeling and analysis techniques. Employing robust natural language processing and machine learning, this technology assesses resumes. The system initiates its process by constructing a model of the job market. Through the analysis of diverse job postings, it identifies critical skills, qualifications, and experiences essential for various job positions. This model serves as a benchmark to evaluate resumes against job requirements, furnishing job seekers with tailored feedback to optimize their resumes for better alignment with employer needs. Furthermore, advanced analytical techniques scrutinize the content and structure of resumes, pinpointing strengths and weaknesses in areas such as work experience, education, and skills. This in-depth analysis results in personalized feedback for job seekers, empowering them to refine their resumes and enhance their prospects in the competitive job market. Moreover, the system employs machine learning algorithms for continuous improvement. By analyzing an expanding dataset of resumes and job postings, the system evolves, becoming adept at identifying emerging trends and patterns in the job market. This evolution enhances its capacity to provide increasingly valuable feedback to job seekers, reinforcing its role as a dynamic tool in navigating the complexities of the job search landscape.

So we can conclude, modeling and analysis of models or machines are very important and crucial components of the Intelligent Resume Analyzer system.

V. WORKFLOW OF SYSTEM

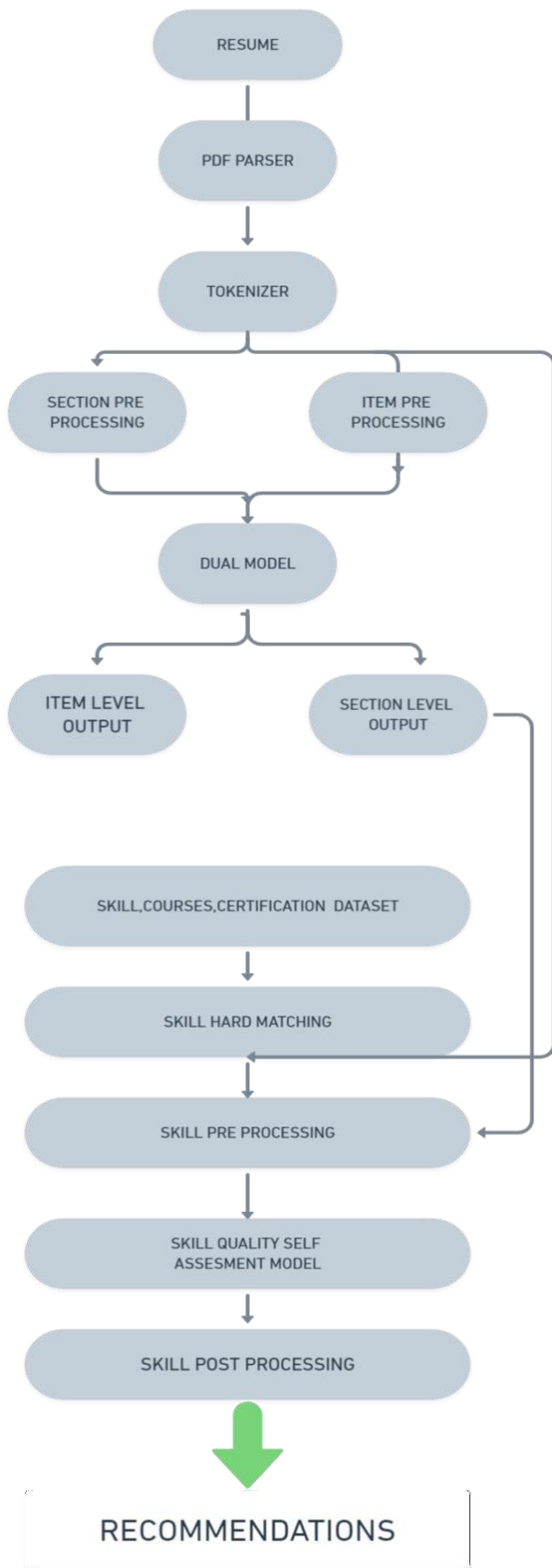


Fig.5. 1: Workflow of the system

VI. RESULT AND CONCLUSION

The Intelligent Resume Analyzer system relies heavily on modeling and analysis. Technological models and analyzes resumes using powerful natural language processing and machine learning techniques and delivers results valuable insights for job seekers to improve their resume.



Fig. 6.1 :- System User Interface

The system also utilizes sophisticated analytical tools to examine the content and composition of resumes, highlighting strengths and weaknesses based on work experience, educational background, and specific skills. The results of this analysis are used to provide candidates with personalized recommendations on how to enhance their resumes and improve their chances of landing a job.

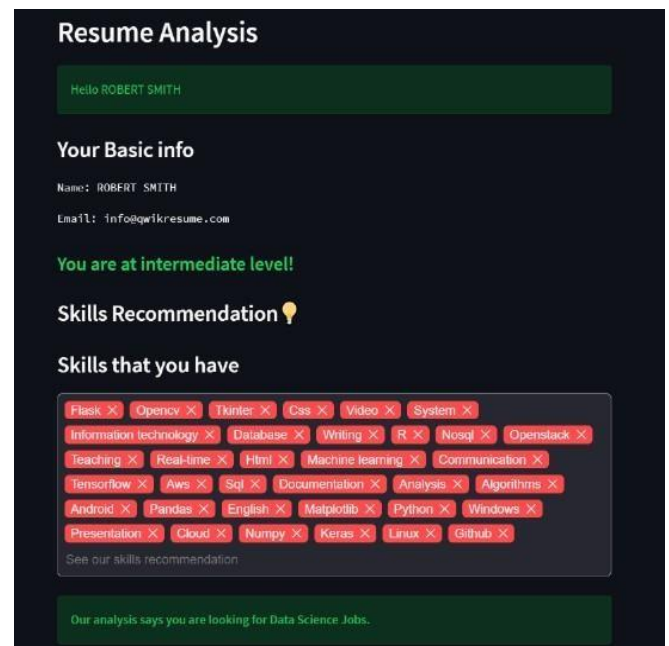


Fig. 6.2:- : Resume Analysis Page 1

The system also utilizes machine learning algorithms to continuously enhance its analysis and feedback capabilities. As the system continues to analyze more resumes and jobs, it will become better at recognizing trends and patterns in the job market and will be able to provide even better feedback to the job seekers.

All in all, modeling and analysis play an essential role in the Intelligent Resume analyzer. By modeling the job market and analyzing resumes using sophisticated natural language processing (NLP) and machine learning techniques, the system provides personalized feedback to job seekers on how to enhance their resumes and increase their chances of success on the job market.

## VII . CONCLUSION

All in conclusion, the Intelligent Resume Analyzer system is an effective instrument that uses machine learning and artificial intelligence to evaluate resumes and provide recommendations for improvement. The method aims to help job seekers craft resumes that will stand out during the screening process leading up to interviews. By harnessing the power of artificial intelligence and natural language processing techniques, the system provides job seekers with personalized feedback to help them improve their resumes and increase their chances of success.

The methodology section of the Intelligent Resume Analyzer system covered the study design, data collection, and analytical methods used in the system's development.

All things considered, the Intelligent Resume Analyzer technology could revolutionize the way job seekers create resumes and submit applications for jobs. By providing tailored feedback, technology can assist job seekers in creating resumes that accurately showcase their qualifications and increase their chances of landing a position. The Intelligent Resume Analyzer technology can provide job seekers with a considerable competitive advantage as the labor market becomes more competitive.

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