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# Analyzing Resume using Natural Language Processing Machine Learning and Django

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***Abstract:** Parse details from a resume using natural language clarifying, find the keywords, assemble them onto sectors based on their keywords and lastly show the most relevant resume to the manageress based on keyword matching. Initially, the user transmits a resume to the web platform. The parser parses all the crucial information from the resume and auto fills a form for the user to analyze. Once the user confirms, the resume is displayed to the employers. Also, the user gets their resume in both JSON format and GUI view. Parsed data include name, email address, social profiles, years of work experience, work experiences, years of edification, education experiences, publications, certifications, volunteer experiences, keywords and finally the cluster of the resume , Computer science, human resource are the best examples.*

***Keyboard***
***NLP-Natural language Processing***
***ML – Machine Learning***
***CV – Curriculum Vitae***
***HTML – Hyper Text Markup Language***
***ANN – Artificial Neural Network***
***ID3 – Iterative Dichotomiser 3***

## I. INTRODUCTION

After completing education the next stage that comes in a person's growth is job. However, there are lots of people who start working before finishing their official education. While searching for jobs the most important thing to represent an applicant is Curriculum Vitae (CV) or Resume. In this era of technology, job searching has become more smart and easier at the same time. However, there are more than enough applicants for a single job and it is really hard for an employer to select candidates only based on their CV / Resume. To solve this problem, there are companies who provide particular format for their applicants so that they can make this process a little bit easier. Even after doing that the process is still pretty boring and most of the cases full of errors.

## II. LITERATURE SURVEY

Human Resource (HR) agencies use numerous head hunting tools and online search methods. These search methods are connected with the database of millions of resumes. These are the simple search engines that parse the resumes against the specified keywords and offer the best match. Mismarking certain words and terms could immediately prohibit your resume and lead to missed job opportunities. In addition to spell check have a few diverse people read over your resume to ensure everything is perfect.
The model we propose has four steps:

1) *Resume Collection:* This step involves the gathering of various resumes uploaded by the candidates.
2) *Keyword Searching:* This is one of the most essential steps of our model. A knowledge base consisting of various keywords are made from the primary training data. The input text which is collected needs some prior treatment before it can be used.
3) *Addition in Knowledge Base:* While the keywords found in resume text will be matched, the words which are not found in the knowledge base are further examined and if found relevant, are added to the knowledge base.
4) *Ranking and Categorization:* After getting the rating score of the resume, a candidate can be graded on the basis of his resume's score.

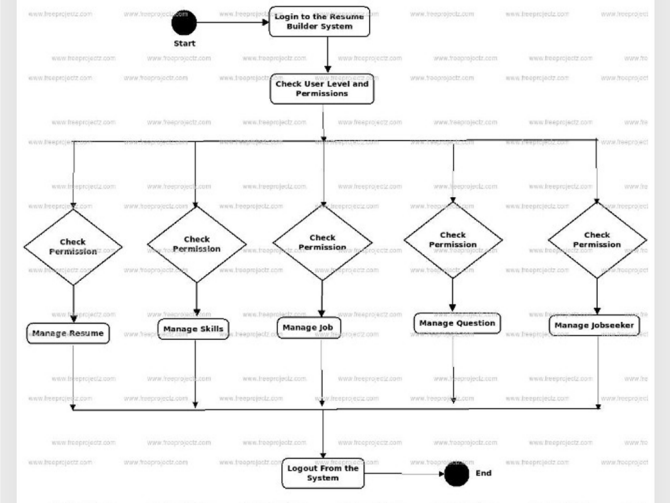


Fig. 1

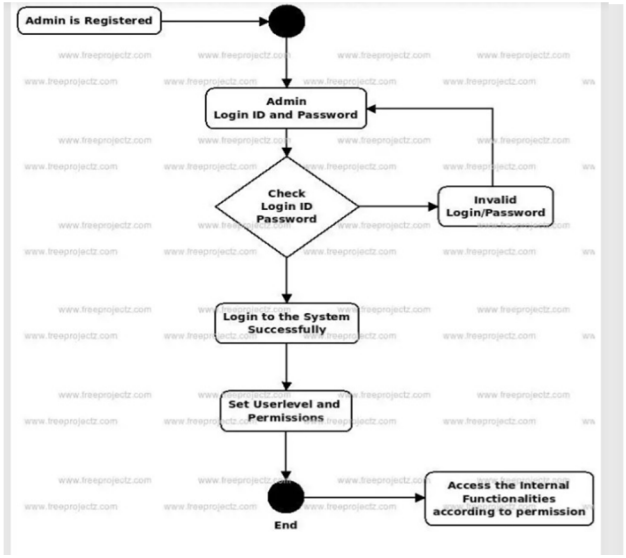


Fig. 2

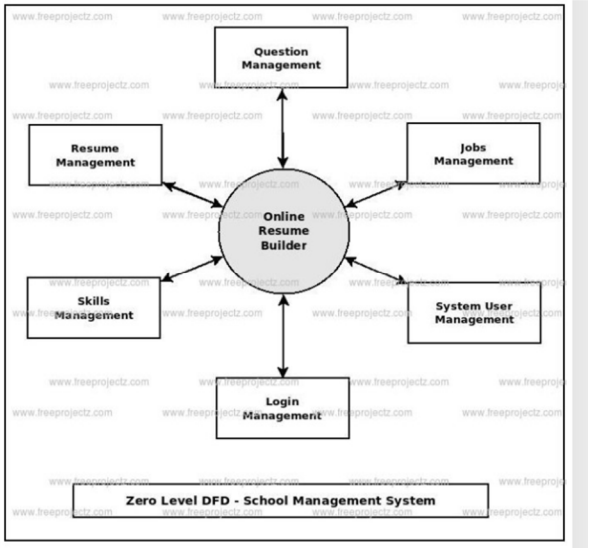


Fig. 3

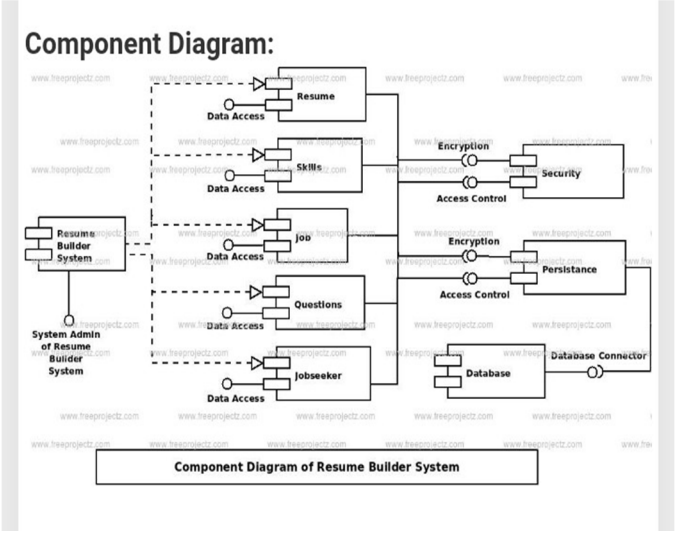


Fig.4

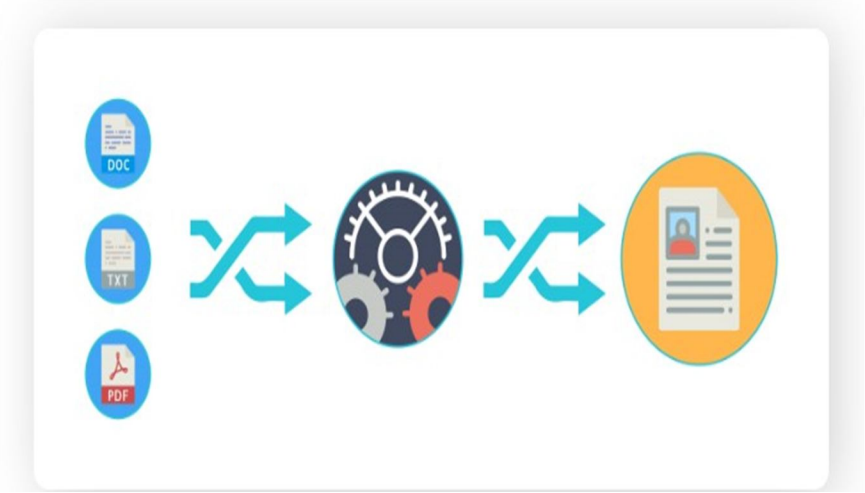


Fig. 5

## III. CONCLUSION

Any organisation whether a start-up or big, the role of resume parsing cannot be reimburse with human resource. Technology andrevolution are helping companies to work efficiently and economizing cost. Any employee if not screened well before boarding then he/she might leave the organisation within a year and to compensate that work, the cost gets doubled.

## IV. ACKNOWLEDGEMENT

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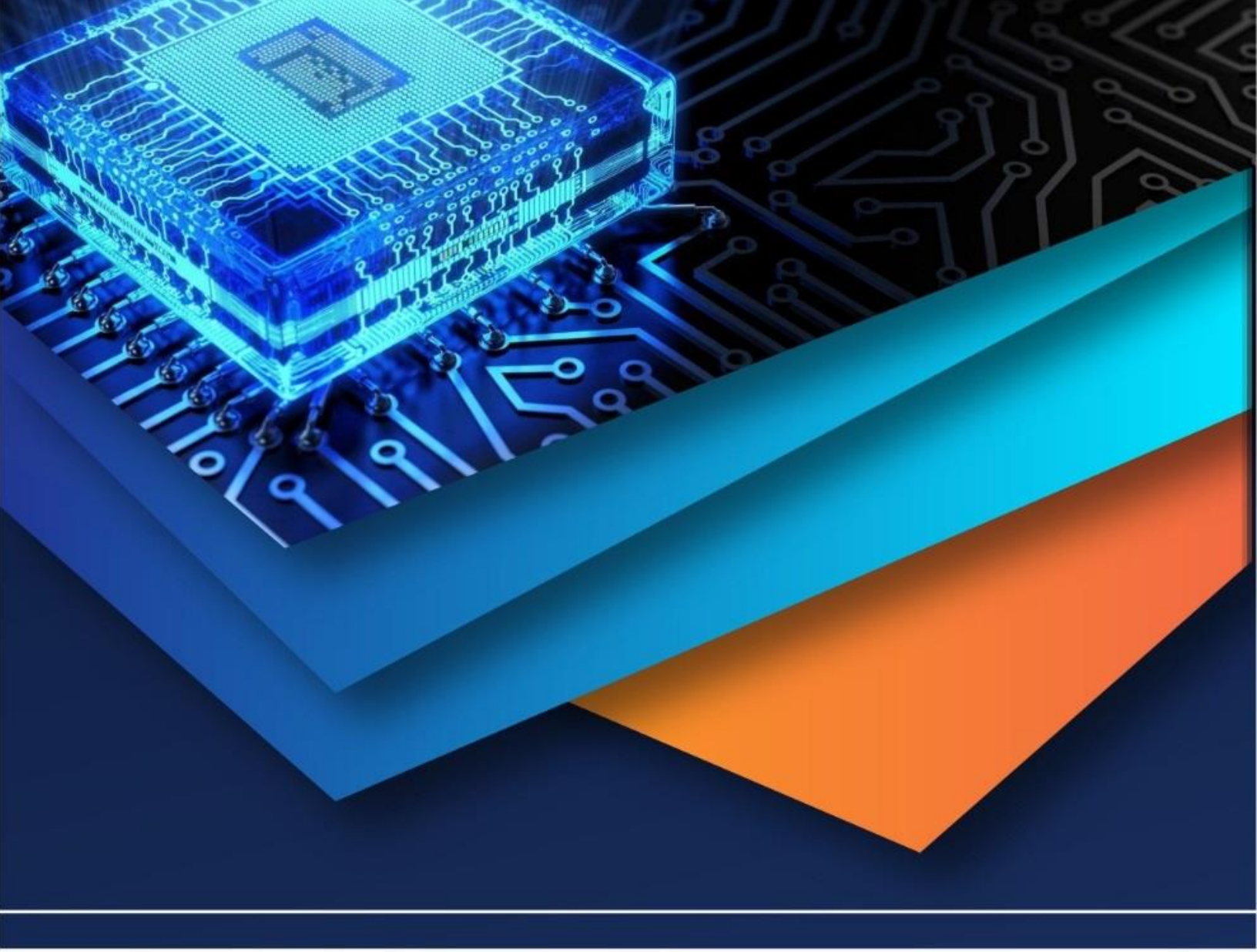

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