

# A Resume Evaluation System

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## Abstract:

This study explored the applying of interview robots on the enlisting method. By adopting techniques together with net creeping, text mining, and language process, this study developed an efficient system that matches job candidates with recruiters.

The designed system analysed electronic résumés in ancient Chinese, on that the words were stratified per the duty market on the net and enforced with techniques associated with huge information.

The results incontestable that the designed system known this demand on talent-seeking and quickly bestowed candidate rankings for a selected position, thereby fulfilling the needs of each job-hunting candidates and talent-seeking recruiters.

**Keyword:** Machine Learning, text mining, Classification.

## Introduction:

This study developed a Machine Learning-based interviewing system to reduce the loss of talent caused by the emotional reactions and subjectivity of interviewers when viewing résumés. The designed system performs the function of résumé assessment and explores the personality traits of candidates by classifying them into four dimensions of soft power, namely dominance, influence, steadiness, and compliance (DISC) after assessing the submitted electronic résumés. This system also assesses three dimensions of competence, namely education and experience, skills, and personality traits, which are indicated by the information contained in a résumé (e.g., education, experience, specialties, and autobiography). The system examines the aforementioned data by collecting the current job market demands on the internet, performing natural language processing, and analyzing the big data relevant to the position in question. The results of this the examination can help determine the quality of the match between job applicants and a business. Finally, the designed the system quantifies the aforementioned DISC data and three competency dimensions by scoring each résumé. The result are then compiled into a report that contains the personal analysis, ranking, and distribution forecast for the candidate in question.

**Related Work:**

The recruitment process consumes considerable time and personnel resources. A study proposed a simplified recruitment model in which a test of mental stress was automated, and text mining was applied to create a list with applicant scores for specific jobs. This approach proved to be effective in matching the personality traits, skills, and personal qualities of applicants with the positions for which they applied.

Being interviewed can be particularly difficult for recent graduates because of introversion or insufficient experience. Stanica et al. incorporated virtual reality and a chatbot into an interactive system to help software engineers improve their interview skills. The results demonstrated that the system helped job candidates improve their interview performance.

**1. Methodology**

The architecture of the designed system, which operates in four stages: (1) The system collects phrases related to the DISC traits and three competency dimensions to build a basis for quantification and scoring in later stages. (2) The system, which is capable of performing character segmentation and filtering out stop words, is applied to preprocess the data collected in the previous stage and the text of the résumés submitted by candidates. (3)

The current job market on the Internet.

(4) The designed system delivers visualized data reports to users after performing big data computation. These reports can help both the job applicant and the recruiters

Understand the attributes and potential of the job applicant, thereby increasing the degree of appropriate job matching.

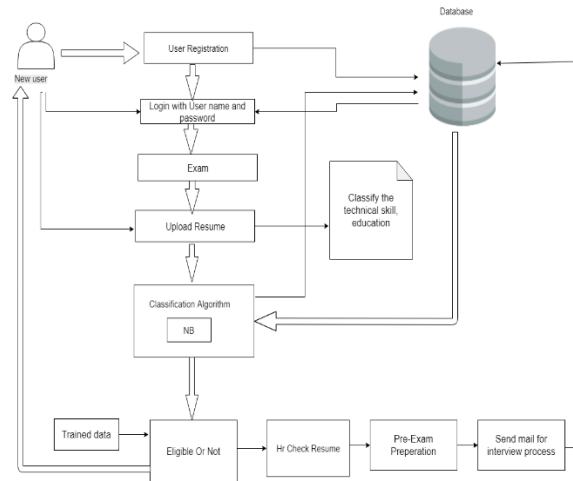
**Motivation:**

The system produces a period on-line report that informs candidates of their soft power attributes and competence ranking and shortcomings.

This is often a great tool for self-evaluation.

Recruiters also can perceive job candidates through these on-line reports.

The reports can function as a reference for talent choice and analysis

**System Architecture:****Fig: system overview**

The new user needs to register and login to upload the resume. Then classify the technical skill and education. The accuracy of classifiers can be identified by comparing the algorithms and according to that we will classify the candidate eligible or not and the candidate is eligible then send mail for the next interview process.

**Algorithm Used:-****1) Naive Bayes:-**

In the Naïve Bayes classifier, we predicate the result, depending upon the training dataset. Naive Bayes classifier assumes that the presence of a particular feature in a class is unrelated to the presence of any other feature. For example, a fruit may be considered to be an apple if it is red, round, and about 3 inches in diameter.

Even if these features depend on each other or upon the existence of the other features, all of these properties independently contribute to the probability that this fruit is an apple and that is why it is known as Naïve Bayes. Naive Bayes model is easy to build and particularly useful for very large data sets. Along with simplicity. Naive Bayes is known to outperform even highly sophisticated classification methods.

**Conclusion:-**

In the system designed in this study, computing is performed based on two models, namely DISC and the three competency dimensions. After a résumé is processed using these two models, the system produces a real-time online report that informs candidates of their soft power attributes (i.e., DISC dimensions) and competency ranking and shortcomings; this is a useful tool for self-evaluation. Recruiters can also understand job candidates through these online reports; the reports can serve as a reference for talent selection and evaluation.

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