

## Candidate Job Recommendation System

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**Abstract-** In the modern world online jobs became the major component of recruitment industry. Candidate Job recommendation system is using to shortlist the candidate based on their resume and skills in which system are matching the students skill with the company requirement and suggesting companies name by analysing their Resume by using Naïve Bayes, where the selected student will get offer message and rejected student will get the feedback with resources to improve their skills. Company can also view the rank of selected student and download their Curriculum Vitae. Basically there are three phases Student, Admin, Company portal. Main aim of candidate job recommendation system is to analysing the CV and give job suggestion to the student and the resources and feedback to the rejected student. For this we are using data mining algorithm like Naïve Bayes.

**Keyword** – Data Mining, Naïve Bayes, Navicat Lite for MySQL, NetBeans IDE

### I. INTRODUCTION

This will enable a more effective way to shortlist the candidate by submitting CVs from a large number of applicants providing a consistent and fair CV ranking policy, which can be legally justified. The system will rank the CV's based on the experience and other key skills which are required for particular job profile. It will also help the HR department to easily shortlist the candidate based on the CV ranking policy. Moreover it will focus not only in qualification and experience but also focuses on other important insights which are required for particular job position. Candidate here will register themselves with all its details and will upload their own CV into the system which will be further used by the system to shortlist their CV. Finally the candidates will get selected or rejected. If the student get selected they will get selected message and the student who will get rejected will get feedback with resources.

However, there are inherent challenges in building such systems in the domain of job search and recommendations.

**a) Scalability:** Building a mountable recommendation system for many users and jobs is critical. In the recent years, item-based recommendation systems have increased more popularity as they are more scalable compared to their user based counterparts [2], [3]. However, with the massive amount of incoming jobs everyday, building and maintaining a job-based system is not easy. We propose a System that takes input from user in the form resume and analysis the resume and give job recommendation/ resources for improving.

**b) Job Similarities/Sparsely:** User actions are typically captured by user-item interactions expressed as ratings in domains such as movie recommendations. These ratings are then used in computing a variety of comparison metrics between items or users; namely cosine or correlation-based measures [4]. However, asking users to rate or rank jobs based on their significance is not accurate or applicable in a real world recruiting systems. Online recommendation systems use variety of explicit and implicit information sources such as purchasing histories in e-commerce systems [5], [6], browsing and clicking actions in news recommendations [7], or views in online video recommendation [8]. One major drawback of relying on such data sources alone is the high level of data sparsity in which typical item-item similarity measures may fail [9]. Hence, we explore various data sources in the jobs domain and develop alternative similarity measures to fully capture the relationships between jobs, and alleviate the data sparsity problem.

In this paper, we propose a novel item-based job recommendation system to overcome the above challenges. Our model aims at filling the gap in existing job recommendation systems from the recruiter perspective, less insights are given to them, as a result they lack in gaining various insights about a candidate. From a candidate perspective, a rejected candidate is not given proper feedback and are not provided with suitable resources for their improvement in future. Rejected candidates are provided with detailed feedbacks and resources for their overall improvement. To make the recruitment process effective and time worthy. The system will automatically determine the key skill characteristic by defining various insights and ranking decisions. The presented system

automates the processes of requirements specification and applicant's ranking. The proposed system produces ranking decisions that were relatively highly consistent with those of the human experts.

This system will give effective insights which will be useful for employer perspective in order to judge candidates apart from their basic skill sets. PDF file format CV is accepted from students. Apart from basic skill sets of the candidates, we will provide deep insights of their personality to the employer in terms of: • Problem solving skills • Business insights etc. • Feedback to the candidates • Resources to the rejected candidates. • Conversing with experienced professionals via LinkedIn.

**II. RELATED WORK**

Candidate here will register themselves with all its details and will upload their own CV into the system which will be further used by the system to shortlist their CV.

From the recruiter perspective, less insights are given to them, as a result they lack in gaining various insights about a candidate. From a candidate perspective, a rejected candidate is not given proper feedback and not provided with suitable resources for their improvement.

**III. III PROPOSED MODEL**

- Rejected candidates are provided with detailed feedbacks and resources for their overall improvement.
- To make the recruitment process effective and time worthy.
- This system will automatically determine the key skill characteristic by defining various insights and ranking decisions.
- The presented system automates the processes of requirements specification and applicant's ranking.
- The proposed system produces ranking decisions that were relatively highly consistent with those of the human experts.
- This system will give effective insights which will be useful for employer perspective in order to judge candidates apart from their basic skill sets.
- PDF file format CV is accepted from students.

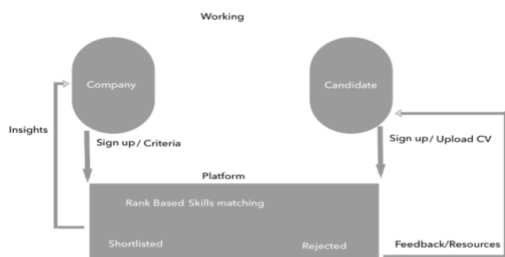


Fig.1

**IV. SCOPE OF PROPOSED MODEL IS:**

This system can be used in many business sectors that may require expert candidate.

This system will reduce workload of the human resource department.

This system will help the human resource department to select right candidate for particular job profile, which in turn provide expert workforce for the organization.

Admin or the concern person can easily shortlist a candidate based on their online test marks and can select an appropriate candidate for desired job profile.

Candidate will provided proper feedback with resources

In company portal company can view the rank of selected students and also download their CV.

**V. RESULT AND DISCUSSIONS**

**A. Login and apply here:**

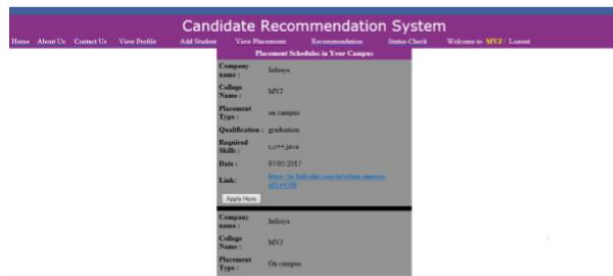


Fig.2

In view placement, placement schedule by company by entering name, username, qualification, required skills, date of placement and the linkedIn link of the company so the students can view and contact company employee and after that student can apply.

**A. B. Job recommendation**



Fig.3

When the student upload their CV, Based on the student CV the system will provide the job details with company name. Here the system is using data mining algorithm naïve bayes for matching their skills.



the human experts. This system will give effective insights which will be useful for employer perspective in order to judge candidates apart from their basic skill sets.

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