

# SKILL AND JOB RECOMMENDER

## ABSTARCT:

The rise of digital communication and the spread of the internet has made an enormous impact in every industry. One such domain is the Hiring process, where a job seeker applies to a job by creating a profile on a job portal by providing all his/her work preferences. These work preferences of each user can be collected from each user and provide job recommendations based on their preference. Data acquired for our study has no previous interaction between the user data and Job listing data. With such a dataset, we have addressed the issue of cold start from both User and Job perspective. Also, recommend the top-n job to the user by analysing and measuring similarity between the user preference and explicit features of job listing using Content-based filtering, which is devised in support of natural language processing and cosine similarity.

## INTRODUCTION:

Nowadays, job search is a task commonly done on the Internet using job search engine sites like Linked In , Indeed , and others. Commonly, a job seeker has two ways to search a job using these sites: 1) doing a query based on keywords related to the job vacancy that he/she is looking for, or 2) creating and/or updating a professional profile containing data related to his/her education, professional experience, professional skills and other, and receive personalized job recommendations based on this data. Sites providing support to the former case are more popular and have a simpler structure; however, their recommendations are less accurate than those of the sites using profile data. Personalized job recommendation sites implemented a variety of types of recommender systems, such as content-based filtering, collaborative filtering, knowledge-based and hybrid approaches.

Based on the person-job fit premise, we propose a framework for job recommendation based on professional skills of job seekers. We automatically extracted the skills from the job seeker profiles using a variety of text processing techniques. Therefore, we perform the job recommendation using TF-IDF and four different configurations of Word2vec over a dataset of job seeker profiles and job vacancies collected by us. Our experimental results show the performances of the evaluated methods and configurations and can be used as a guide to choose the most suitable method and configuration for job recommendation.

# LITERATURE SURVEY

[1] A lot of research has been carried out large variety of job recommendation systems already exist that try to provide one or the other aspect of the information by applying different methods. The key problem is that most of jobs hunting websites just provides recruitment information to website viewers. Students have to retrieve information among those displayed by websites to find jobs they want to apply. The whole procedure is lengthy and inefficient. In addition, many e-commerce websites, uses collaborative filtering algorithm without considering user's resume and item's properties. W. Hong et al. developed HR an online job recommendation system that classifies users into groups by using historical behaviour of users and individual information and then uses the appropriate recommendation approach for each group of users.

[2] in skill and job recommendation ,The recommender systems techniques can be used to address the problem of information overload by prioritize the delivery of information for individual users based on their learned preferences (Lee and Brusilovsky, 2007). Additionally, the success of personalization technologies depends critically on the existence of comprehensive user profiles that precisely capture users' interests (Rafter and Smyth, 2001) and the perfect matching method. Moreover, the recommender systems could use historical rating information to determine which type of job required which type of candidate characteristics in the past in order to be rated positively by the recruiter. This information could then be used to predict the match between job and previously not rated candidates

[3] for job recommendation system, The internet-based recruiting platforms decrease the recruitment time and advertisement cost, they suffer from an inappropriateness of traditional information retrieval techniques like the Boolean search methods. Consequently, a vast amount of candidates miss the opportunity of recruiting. in order to improve the e-recruiting functionality, the recommender system has been enhanced for building personalized recommender systems for candidates and job matching. The fast growth of the internet caused a matching growth of the amount of available online information that increased the need to expand the ability of users to manage all this information. Recommender systems are being broadly accepted in various application to suggest products, services and information items to latent customers.

[4] research done in the job recommender system (JRS) literature from several perspectives These include the influence of data science competitions, the effect of data availability on the choice of method and validation, and ethical considerations in job recommender systems. Furthermore, we branched the large class of hybrid recommender systems to obtain a better view on how these hybrid recommender systems differ. Both this multi-perspective view, and the new taxonomy of hybrid job recommender systems has not been discussed by previous reviews on job recommender systems.

## CONCLUSION:

As mentioned in the abstract, here a web application using web services for skills and job recommendation system are enhanced. The recommender system technologies accomplished significant success in a broad range of applications and potentially a powerful searching and recommending techniques. Consequently, there is a great opportunity for applying these technologies in recruitment environment to improve the matching quality. it analysed the e-recruiting process and the different aspects related to applying the recommender systems in candidates and jobs matching problem.

## REFERENCES:

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