# LITERATURE SURVEY

PROJECT DOMAIN: CLOUD APPLICATION

**DEVELOPMENT** 

PROJECT NAME: SKILL/JOB RECOMMENDER

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# TITLE:

Dynamic user profile – based job recommender system

# **AUTHOR:**

Wenxing Hong, Siting Zheng and Huan Wang

#### ABSTRACT:

In this paper, we propose a dynamic user profile-based job recommender system. To address the challenge that the job applicants do not update the user profile in a timely manner, we update and extend the user profile dynamically based on the historical applied jobs and behaviours of job applicants. In particular, the statistical results of basic features in the applied jobs are used to update the job applicants. In addition, feature selection is employed in the text information of jobs that applied by the job applicant for extending the feature. Then a hybrid recommendation algorithm is employed according to the characteristics of user profiles for achieving the dynamic recommendation.

## **ADVANTAGES:**

- This dynamic job recommender system provides the recommendation jobs that satisfy the changeable preferences of the job applicant.
- Cold-start problem is overcome by applying the user-based collaborative filtering to generate the initial recommendation jobs.
- Multiple models are built and then mixed to generate the eventual recommendations for the user.
- The hybrid approach allows to address gaps in the availability of data while still prioritizing better-performing models.

## **DISADVANTAGES:**

- Scalability
- The context formed in the peak season and the off season has an influence on the job desire of a job applicant.

#### TITLE:

Levelized Taxonomy Approach for the Job seeking / Recruitment Problem

# **AUTHOR:**

Michaël Guedj

#### ABSTRACT:

Recently, job recommendation has attracted a lot of research attention, the aim being to get a sorted list of relevant candidates for an applicant (job seeker or recruiter). To an effective matching, the utilisation of semantic technology has shown good results. Particularly, the use of taxonomy hierarchizing the skill following a relation of inheritance. However, request to the user to weighing the skills is a barrier to a usability and an efficiency of such methods on the user point of view. This paper intends to provide a first answer for such a problem.

## **ADVANTAGES:**

- This approach uses semantic matching which is a technique which combines annotations using controlled vocabularies with background knowledge about a certain application domain.
- The utilisation of semantic technology has shown good results to an effective matching.
- To effectively locate and match individuals and positions, within or from outside an organization, it is important to use semantic technology.

#### **DISADVANTAGES:**

- The disadvantage of this approach is the design of the levelized taxonomy.
- The request to the user to weighing the skills is a barrier to a usability and an efficiency on the user point of view.
- The choices, or even interpretations, must be made by the designer, on the conception of the levelized hierarchy, which is not necessarily obvious, and therefore requires the use of an expert.

#### TITLE:

Generating personalized job role recommendations for the IT sector through predictive analytics and personality traits

# **AUTHORS:**

I.A. Mirza, S. Mulla, R. Parekh, S. Sawant and K. M. Singh **ABSTRACT**:

Collectively, the Information Technology sector forms one of the topmost recruiting industries as of 2015. The industry continues to grow rapidly by expanding its footprint into unexplored verticals and newer technologies. It is imperative that the IT workforce is one that is competent, versatile and adaptive.

Numerous studies have determined that there is a direct correlation between the success achieved in a particular job role and the personality traits that an individual possesses. This study focuses on identifying suitable job roles for an individual who seeks a career in the IT sector by analysing their personality. Additionally, an attempt is made to suggest potentially beneficial and currently relevant skills that the individual could acquire to excel in the suggested job roles. The study uses Holland Codes to understand the individuals' personality and to identify these job roles. Additionally, the five factor model is used to further strengthen the quality of the recommendation made. The identification of skills relevant to a job role is done through the application of data analytics to job listings on web portals.

# **ADVANTAGES:**

- This approach uses the five factor model which is a highly reliable and preferred test diagnosed for personality analysis.
- Time series analysis is used to predict and recommend the skills that may be in demand in the near future.

# **DISADVANTAGES:**

- The five factor model is superficial and only descriptive in a world where self-improvement is a seemingly universal goal.
- This study uses the Holland codes which uses self-reports to gain information to provide reliable results. One of the main issues with selfreports are that the participants can lie.