LITERATURE SURVEY

SKILL AND JOB RECOMMENDED APPLICATION

Shaha T. Al-Otaibi.**[1]**(2012) : The Internet-based recruiting platforms become a primary recruitment channel in most companies.While such 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 missed the opportunity of recruiting. The recommender system technology aims to help users in finding items that match their personnel interests; it has a successful usage in e-commerce applications to deal with problems related to information overload efficiently. In order to improve the e-recruiting functionality, many recommender system approaches have been proposed. This article will present a survey of e-recruiting process and existing recommendation approaches for building personalized recommender systems for candidates/job matching.

Amber Nigam .**[2]**(2014) : Job recommendation has traditionally been treated as a filter-based match or as a recommendation based on the features of jobs and candidates as discrete entities. In this paper, we introduce a methodology where we leverage the progression of job selection by candidates using machine learning. Additionally, our recommendation is composed of several other sub-recommendations that contribute to at least one of a) making recommendations serendipitous for the end user b) overcoming cold-start for both candidates and jobs. One of the unique selling propositions of our methodology is the way we have used skills as embedded features and derived latent competencies from them, thereby attempting to expand the skills of candidates and jobs to achieve

more coverage in the skill domain. We have deployed our model in a real-world job recommender system and have
achieved the best click-through rate through a blended approach of machin elearned recommendations and other sub recommendations. For recommending jobs through machine learning that forms a significant part of our recommendation, we achieve the best results through BiLSTM with attention.

Aneesh Mulay [3](2022) **:** As for today's era, recruitment can be considered as one of most difficult process to undergo for job seeking candidate. Many fresher candidates face issue while job recruitment process to undergo which field of interest. The proposed system will help the user to overcome this difficulties by matching their work experience,skills and other details with appropriate companies suitable for respective user. The system will also help experienced users in getting their intended job on the basis of their last job profile. The job recommendation algorithm developed is tedious nor complicated and will be using user-friendly approach to implement job search.The proposed system consist of user dataset with various attributes and company dataset with company details.

Suraj Patil [4] (2018) **:** We address the problem of recommending suitable jobs to people who are seeking a new job. We formulate this recommendation problem as a supervised machine learning problem. Our technique exploits all past job transitions as well as the data associated with employees and institutions to predict an employee's next job transition. Dealing with the enormous amount of recruiting information on the Internet, a job seeker always spends hours to find useful ones. To reduce this laborious work, we design and implement a recommendation system for online job hunting. In

this paper, we contrast user-based and item-based collaborative filtering algorithm to choose a better performed one. We also take background information including students' resumes and details of recruiting information into consideration, bring weights of co-apply users (the users who had applied the candidate jobs) and weights of student used liked jobs into their recommendation algorithm.

JEEVANKRISHNA [5] (2020) : 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. There had been work done in this field, where researchers have implemented Recsys using the Hybrid filtering method as user data had previous interaction with item (Rafteret al., 2000).In this dissertation, we have approached the problem with the three-tier approach design. 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.

Jorge Valverde-Rebaza[6] (2017) : In the last years, job recommender systems have become popular since they successfully reduce information overload by generating personalized job suggestions. Although in the literature exists a variety of techniques and strategies used as part of job recommender systems, most of them fail to recommending job vacancies that fit properly to the job seekers profiles. Thus, the contributions of this work are threefold, we:
i) made publicly available a new dataset formed by a set of job seekers profiles and a set of job vacancies collected from different job search engine sites

ii) put forward the proposal of a framework for job recommendation based on professional skills of job seekers; and
iii) carried
out an evaluation to quantify empirically the recommendation abilities
of two state-of-the-art methods, considering different configurations,
within the proposed framework.

SvenLaumer[7] (2018) : Based on UTAUT2 and the importance of trust to explain user behaviour in relation to recommender systems, we focus on job recommender systems by developing and validating a job recommender system acceptance model. The results of our empirical, survey-based study with 440 job seekers indicate that beside performance expectancy and habit, trust is among the three most important determinants and it is especially relevant for women, passive job seekers and those without experience in using job recommender Systems.

Shivraj Hulbatte[8](2017) : We address the problem of recommending suitable jobs to people who are seeking a new job. We formulate this recommendation problem as a supervised machine learning problem. Our technique exploits all past job transitions as well as the data associated with employees and institutions to predict an employee's next job transition. Dealing with the enormous amount of recruiting information on the Internet, a job seeker always spends hours to find useful ones. To reduce this laborious work, we design and implement a recommendation system for online job hunting. In this paper, we contrast user-based and item-based collaborative filtering algorithm to choose a better performed one. We also take background information including students' resumes and details of recruiting information into consideration, bring weights of co-apply users (the users who had applied the candidate jobs) and weights of student used liked jobs into their recommendation algorithm.

Z. Ye [9] (2018): Although in the literature exists a variety of techniques and strategies used as part of job recommender systems, most of them fail to recommend job vacancies that fit properly to the job seekers profiles. Thus, the contributions of this work are threefold, we: i) made publicly available a new dataset formed by a set of jobseekers profiles and a set of job vacancies collected from different job search engine sites; ii)put forward the proposal of a framework for job recommendation based on professional skills of job seekers; and iii) carried out an evaluation to quantify empirically the recommendation abilities of two state-of-the-art methods, considering different configurations, within the proposed framework.

Lorenzo Malandri [10] (2021):we propose skills to graph, a job recommendation system based on a knowledge-poor and data-driven approach, which can be adapted to different countries/industries and easily updated over time. skills to graph was realized as part of the research activity of an EU project1, which aims at realizing the first EU real-time labour market monitor, by collecting and classifying Online Job Vacancies (OJVs) from all 27+1 EU.

Nikolaos D [11] (2022):The proposed calculation FoDRA (Four Aspects Suggestion Calculation) evaluates the reasonableness of a task searcher for a task position in a more adaptable manner, utilizing an organized type of the job and the up-and-comer's profile, created from a substance examination of the unstructured type of the expected set of responsibilities and the competitor's CV

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