LITERATURE SURVEY

Paper title: Job Recommendation System Based on Candidate

Profiles (IRJET) e-ISSN: 2395 -0056 (May -2017).

Author name: Dheeraj Bahl.

Methodology: Information retrieval

There are endless algorithms to help a seeker find the right job, some are the traditional algorithms while some are newly found and there are a large number of hybrid algorithms which are a combination of many algorithms. All these algorithms have only the goal to seek a righteous job for the candidate. collaborative filtering is a popular recommendation algorithm that bases its predictions and recommendations on the ratings or behavior of other users of the system. It also uses a profound technique called Information Retrieval (IR). Information Retrieval is a new and advanced technique used for achieving the most accurate and desired result without compromising on the efficiency of the result.

Paper title: A survey of job recommender systems Vol. 7(29),

pp. 5127-5142, 26 July, 2012.

Author name: Shaha T. Al-Otaibi

Methodology: Collaborative filtering approach

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. In order to improve the e-recruiting functionality, many recommender system approaches have been proposed. This article will present a survey of the e-recruiting process and existing recommendation approaches for building personalized recommender systems for candidates/job matching. Collaborative filtering (CF) is one of the most successful approaches for building recommender systems. It applies the known preferences of a set of users to predicate the unknown preferences for new users. Collaborative filtering approaches have the capability of working in domains where items contents are difficult to obtain or cannot be parsed automatically.

Paper title: Job Recommendation System (may2020)

Author name: Jeevan Krishna

Methodology: Content-based filtering

The recommender system is becoming part of every business. The business tries to increase its revenue by raising the user's interaction by recommending new items based on user preferences. We have witnessed the rise of Netflix in the entertainment domain, using their strategies to implement a recommender system into their existing ecosystem.

Content-based filtering (CBF): These are the most subjective and descriptive based filtering. Content-based filtering can also be called as attribute-based recommender as it uses the explicitly defined property of an item. It is an approach to an information retrieval or machine learning problem. The assumption made in content-based filtering is that the user prefers items with similar properties. Content-based filtering recommends items to the user whose properties are similar to the item which the user has previously shown interest. Mobasher(2007) expresses that drawback of this filtering technique is their tendency to over-specialize in suggesting the item to a user profile as user profiles are relayed on an attribute of the previous item opted by the user.

Paper title: Job Recommender System (29 november, 2021)

Author name: Sandjai Bhulai

Methodology: Job recommender system

This paper provides a review of the job recommender system (JRS) literature published in the past decade (2011-2021). Compared to previous literature reviews, we put more emphasis on contributions that incorporate the temporal and reciprocal nature of job recommendations. Previous studies on JRS suggest that taking such views into account in the design of the JRS can lead to improved model performance. Also, it may lead to a more uniform distribution of candidates over a set of similar jobs. We also consider the literature from the perspective of algorithm fairness. Here we find that this is rarely discussed in the literature, and if it is discussed, many authors wrongly assume that removing the discriminatory feature would be sufficient. With respect to the type of models used in JRS, authors frequently label their method as 'hybrid'. Unfortunately, they thereby obscure what these methods entail. Using existing recommender taxonomies, we split this large class of hybrids into subcategories that are easier to analyze. We further find that data availability, and in particular the availability of click data, has a large impact on the choice of method and validation. Last, although the generalizability of JRS across different datasets is infrequently considered, results suggest that error scores may vary across these datasets.

Paper title : Job Recommendation System Using Profile Matching and Web-Crawling(May 2016).

Author name: Deepali V Musale

Methodology: Rule-based Filtering

A lot of research has been carried out in the field of job recommender systems. A 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 job hunting websites just provide recruitment information to website viewers. Students have to retrieve information among those displayed by websites to find jobs they want to apply for.

Rule-based Filtering (RBF): These filtering techniques depend upon decision rules such as an automatic or manual decision rule that are manipulated to obtain a recommendation for the user profile. Currently, the E-commerce industry uses a rule-based filtering technique to recommend an item based on the demographic region of a user, purchase history, and other attributes that can be used to profile an user. A drawback in rule-based filtering is that the user feeds the information to the system. These inputs are utilized as a description of a user profile or can be considered as a preference of a user, defined by the user. Thus the data acquired is prone to bias. With the age of the user's profile, recommendation tends to hit saturation and becomestaticMobasher (2007).