

LITERATURE SURVEY

1) In year 2021, "Machine Learning and Applications" .

AUTHORS: Jun Zhu, Gautier Viaud, Celine Hudelot.

Recently, due to the ubiquity and supremacy of E-recruitment platforms, job recommender systems have been largely studied. In this paper, we tackle the next job application problem, which has many practical applications. In particular, we propose to leverage next-item recommendation approaches to consider better the job seeker's career preference to discover the next relevant job postings (referred to jobs for short) they might apply for. Our proposed model, named Personalized-Attention Next-Application Prediction (PANAP), is composed of three modules. The first module learns job representations from textual content and metadata attributes in an unsupervised way.

The second module learns job seeker representations. It includes a personalized-attention mechanism that can adapt the importance of each job in the learned career preference representation to the specific job seeker's profile. The attention mechanism also brings some interpretability to learned representations. Then, the third module models the Next-Application Prediction task as a top-K search process based on the similarity of representations. In addition, the geographic location is an essential factor that affects the preferences of job seekers in the recruitment domain. Therefore, we explore the influence of geographic location on the model performance from the perspective of negative sampling strategies.

2) In year 2018, "International Conference on Computing, Engineering, and Design (ICCED)".

AUTHORS: Akeem Olowolayemo, Kamaleiah Harun, Teddy Mantoro.

With the advancement in technology, job seekers who among them are fresh graduates will tend to use e-recruiting to find opportunity and apply for jobs. One of the desires of any university is to be able to track the employability of their graduates. After graduating, they often require their graduates to fill an online system prepared by the university which functions to know whether they are getting jobs and to records their jobs details in order to analyse the university's graduate's employability.

Unfortunately, universities are unable to track down the progress of their graduate students in terms of their job application status. This work aims to propose a system that enables university to track their graduate students' job information via a mobile application. It also had a feature for students who have not secure a job position or wish to change their

job to apply for available job opportunities after graduating.

The profile of each student in the application is auto-created from information extracted from graduating students' file from university database which the student can then customize to include their job status. This application has the potential to help the universities in gathering information regarding their graduate's employability and helps graduates in finding jobs.

3) In year 2020, "International Conference on Artificial Intelligence, Big Data, Computing and Data Communication Systems (icABCD)".

AUTHORS: Motebang Daniel, Tranos Zuva.

With a rapid growth of internet technologies, many companies have transformed from the old traditional ways of recruiting employees to e-recruiting. E-recruiting channels achieved a solid advantage for both employers and applicants by dropping advertising costs as well as hiring time. Job recommender system aim to help in people - job matching.

In this research, a proposed mobile job employment recommender system is a client - server application that uses content - based filtering algorithm to enable the initial selection of a suitable leisure job seeker to a temporary job at a particular place and vice versa. A prototype of a mobile job recommendation application was developed to evaluate the algorithm. The experimental results of the proposed algorithm show the effectiveness of the system to recommend suitable candidates for jobs at a specified area.

4) In year 2015, "Information, Intelligence, Systems and Applications (IISA)".

AUTHORS: Nikolaos D. Almalis, George A. Tsihrintzis, Nikolaos Karagiannis,
Aggeliki D. Strati.

In this paper, we propose a content-based recommendation Algorithm which extends and updates the Minkowski distance in order to address the challenge of matching people and jobs. The proposed algorithm FoDRA (Four Dimensions Recommendation Algorithm) quantifies the suitability of a job seeker for a job position in a more flexible way, using

a structured form of the job and the candidate's profile, produced from a content analysis of the unstructured form of the job description and the candidate's CV. We conduct an experimental evaluation in order to check the quality and the effectiveness of FoDRA. Our primary study shows that FoDRA produces promising results and creates new prospects in the area of Job Recommender Systems (JRSs).

5) In year 2017, "International Conference on Computer Science and Engineering (UBMK)".

AUTHORS: Kemal Can Kara, Samet Esen, Nese Kahyalar, and A. Askın Karakas.

Recommender systems help people to find items of interest by utilizing past user interactions (such as product views, ratings, and purchases). Today many e-commerce sites and large scale web applications use recommender systems and provide their customers personalized products. In this work we will share our recent experience in developing a job recommender system based on collaborative filtering at Kariyer.net. In particular, we will explain how and why we choose the recommender algorithm developed in the system, methods for evaluating success, and the system architecture. We will also mention future work that we plan to pursue for solving the problems we face in practice after this successful first attempt. Authorized officers have access to this information.