#### SKILL AND JOB RECOMMENDATION SYSTEM

**TEAM ID: PNT2022TMID08606** 

**TEAM MEMBERS**: Guhan Prasath RR, Siva P, Ajay R, Sivanesh Kumar M

# [1] "A combined representation learning approach for better job and skill recommendation"

**Authors:** Vachik S. Dave, Mohammad Al Hasan, Baichuan Zhang, Khalifeh Aljadda and Mohammed Korayem.

**Abstract:** In this experiments, it is shown that by jointly learning the representation for the jobs and skills, this model provides better recommendation for both jobs and skills. Additionally it also show some case studies which validate the claims.

### [2] "Job Recommendation System Using Profile Matching And Web-Crawling"

Authors: Deepali V Musale, Mamta K Nagpure, Kaumudini S Patil, Rukhsar F Sayyed

**Abstract:** The developed system is job recommendation system for campus recruitment which helps college placement office to match company's profiles and student's profiles with higher precision and lower cost. For profile matching, two matching methods are used: semantic matching, tree based knowledge matching and query matching. These methods are integrated according to representations of attributes of students and companies, and then the profile similarity degree is acquired. Based on profile similarity degree, preference lists of companies and students are generated. Also students can perform keyword based search for job profiles from various job recruitment sites. For obtaining data from online recruitment sites system uses web crawling. With loop matching, matching results would be further optimized and provide more effective guidance for recommendation.

## [3] "Job Recommendation System Based On Skill Sets"

Authors: G.Mahalakshmi, A.Arun Kumar, , B.Senthilnayaki, J.Duraimurugan

**Abstract:** Machine learning is a sub-field of data science that concentrates on designing algorithms that can learn from and make predictions on the data. Presently recommendation frameworks are utilized to take care of the issue of the overwhelming amount of information in every domain and enable the clients to concentrate on information that is significant to their area of interest. One domain where such recommender systems can play a significant role to help college graduates to full fill their dreams by recommending a job based on their skill set. Currently, there are plenty of websites that provide heaps of information regarding employment opportunities, but this task is extremely tedious for students as they need to go through large amounts of information to find the ideal job. And many students are not aware

of which job is suitable for them. Nowadays, the IT fields are in a boom. Many engineering students are learning some technical skills by doing some courses but they don't know which skill is for which job.

### [4] "Technical Job Recommendation System Using APIs and Web Crawling"

Authors: Naresh Kumar, Manish Gupta, Deepak Sharma, and Isaac Ofori

Abstract: There has been a sudden boom in the technical industry and an increase in the number of good startups. Keeping track of various appropriate job openings in top industry names has become increasingly troublesome. This leads to deadlines and hence important opportunities being missed. Through this research paper, the aim is to automate this process to eliminate this problem. To achieve this, Puppeteer and Representational State Transfer (REST) APIs for web crawling have been used. A hybrid system of Content-Based Filtering and Collaborative Filtering is implemented to recommend these jobs. The intention is to aggregate and recommend appropriate jobs to job seekers, especially in the engineering domain. The entire process of accessing numerous company websites hoping to find a relevant job opening listed on their career portals is simplified. The proposed recommendation system is tested on an array of test cases with a fully functioning user interface in the form of a web application. It has shown satisfactory results, outperforming the existing systems. It thus testifies to the agenda of quality over quantity.