Skill / Job Recommender Application

Sridevi G.M, S. Kamala Suganthi(2022) proposed AI based suitability measurement and prediction between job description and job seeker profiles to overcome the difficulties faced in Hiring a suitable candidate for a certain job is highly demanding. Many organizations face challenges to hire a suitable candidate as they seek specific requirements mentioned in the Job Description.Clusters are prepared based on the skills of the employee and a suitable measure is proposed based on the cluster parameters.Using the three classifiers linear regression, decision tree, Adaboost, and XGBoost the prediction of candidate suitability is performed and maximum average accuracy of 95.14% is achieved for the XGBoost classifier.

D. Mhamdi, R. Moulouki, M. Y. El Ghoumari, M. Azzouazi, L. Moussaid(2022) proposed Job Recommendation based on Job Profile Clustering and Job Seeker Behavior to present a recommender system that aims to help job seekers to find suitable jobs.Job offers are collected from job search websites then they are prepared to extract meaningful attributes such as job titles and technical skills. Job offers with common features are grouped into clusters. As job seeker like one job belonging to a cluster, he will probably find other jobs in that cluster that he will like as well. A list of top n recommendations is suggested after matching data from job clusters and job seeker behavior, which consists on user interactions such as applications, likes and rating.

Anna Giabelli , Lorenzo Malandri , Fabio Mercorio, Mario Mezzanzanica,Andrea Seveso (2021) proposed Skills2Job: A recommender system that encodes job offer embeddings on graph databases.The recommender system containing a set of users' skills, identifies the most suitable jobs as they emerge from a large dataset of Online Job Vacancies (OJVs). The processing of 2.5M+ OJVs posted in three different countries (United Kingdom, France, and Germany), training several embeddings and performing an intrinsic evaluation of their quality. Besides, we compute a measure of skill importance for each occupation in each country, the Revealed Comparative Advantage (rca).The best vector model, one for each country, together with the rca, is used to feed a graph database, which will serve as the keystone for the recommender system. Results are evaluated through a user study of 10 labor market experts, using P@3 and nDCG as scores. Results show a high precision for the recommendations provided by skills2job, and the high values of nDCG (0.985 and 0.984 in a [0,1] range) indicate a strong correlation between the experts' scores and the rankings generated by skills2job.

Carlos Usabiaga ,Frey and Osborne (2017), to proposed the Skill requirements and labor polarization: An association analysis based on Polish online job offers.Who estimated that 47% of the U.S. labor force may face a high risk of being replaced by technology.On the other hand, we can find some studies which criticize the conclusions of this last study and reveal less alarming results for OECD, European Union or G20 countries (Arntz et al., 2016; West, 2018). There are empirical (Van Roy et al., 2018) and theoretical studies which posit that automation and employment may grow hand in hand, provided that new technologies induce the creation of new tasks in which humans have advantage over machines (Acemoglu and Restrepo, 2019, 2020).

Naif Radi Aljohani,Ahtisham Aslam to proposed the Bridging the skill gap between the acquired university curriculum and the requirements of the job market: A data-driven analysis of scientific literature.Innovation and knowledge are the two main stumbling blocks to developing new technologies for society (Tiberius, Schwarzer & Roig-Dobón, 2021).Only by mastering the skills to mitigate the upcoming challenges and technological demands of Industry 5.0 (Ballestar de las Heras et al., 2020) can it be sure to develop innovation in the actual sprint (Hilmersson & Hilmersson, 2021).Thus, individuals must acquire the necessary information, skills, values and attitudes to live productive lives, make informed decisions and, through education, contribute both locally and internationally when facing and addressing global issues (Haddad, Haddad & Nagpal, 2021).The study of the job market is a growing field of interest, using new data sources and analytical tools, and is particularly important in practical fields such as computing (Woolridge, 2016).

Rhiannon Lord,Ross Lorimer,Ashley Richardson to proposed The role of mock job interviews in enhancing sport students' employability skills: An example from the UK.Rising university fees and unstable job markets have led to graduates' attainment of a full-time graduate-level job being a dominant indicator of success (Whiteley, 2016).Abertay University, Dundee, UK.Graduate employability is a global issue that spans across subject areas and academic disciplines (Jackson & Bridgstock, 2018; Kalfa & Taksa, 2015; Pavlin & Svetlik, 2014).Indeed, policymakers across the globe are increasingly using graduate employment as a measure of the value of graduates and Higher Education Institutions (HEIs) (Jackson & Bridgstock, 2018). The Graduate Outcomes Survey (GOS) in Australia and the Destination Leavers from Higher Education survey (DLHE) in the UK are both examples of this activity. Thus, HEIs are increasingly expected to prepare prospective graduates for graduate-level employment, offering opportunities to develop work-based knowledge, skills and personal attributes which benefit students, the workforce, communities and the economy (Taylor, 2017; Yorke, 2006).

Robert Zimmermann,Patrick Brandtner to propose the Job Profiles in the Field of Data-Driven Supply Chain Management An Analysis of the Austrian Job Market.University of Applied Sciences Upper Austria, Wehrgrabengasse 1-3 Steyr 4400, Austria.To implement data-driven SCM, companies need to possess the right skilled employees. Job advertisements in the field of data-driven SCM come with multiple different titles, sets of tasks, requirements, and desired soft skills.Therefore, determining which job profile typically inherits which specific requirements, tasks and soft skills presents a challenging task.

Andrea De Mauro,Marco Greco,Michele Grimaldi,Paavo Ritala (2018) proposed Human resources for Big Data professions: A systematic classification of job roles and required skill sets to overcome the clarity that which types of job roles and constitute the area. The study pursues to drive clarity across the heterogeneous nature of skills required in Big Data professions, by analyzing a large amount of real-world job posts published online. The identification of four Big Data job families, recognition of nine homogeneous groups of Big Data skills (skill sets) that are being demanded by companies and characterization of each job family with the appropriate level of competence required within each Big Data skill set is done and the demand can be more effective in market place.

Wenbo Chen, Pan Zhou , Shaokang Dong , Shimin Gong , Menglan Hu , Kehao Wang and Dapeng Wu (2018) proposed a Tree-Based Contextual Learning for Online Job or Candidate Recommendation With Big Data Support in Professional Social Networks: An online mining and predicting system is proposed for personalized job or candidate recommendation with the support of big-data. Here, this system considers an user's explicit information to achieve personalized recommendation. To overcome the problem in big-data Scenario , developed a tree based model to analyze items in cluster level. The dynamic property of Professional Social Networks(PSN) the model is adaptive for expanding dataset and enables it to make accurate recommendations for the incessant new arrivals in real-time.

Manases Jesus Galindo Bello (2019) Proposed a Cloud-based Conversational Agents for User Acquisition and Engagement : The benefits of cloud computing have driven different companies from diverse sectors to migrate their products and services to the cloud. Cloud computing and Software engineering practices shall be followed to develop two versions of chatbot that is one from scratch deployed as a cloud-native application on a Platform as a Service and another utilizing a chatbot-building tool(Software as a Service). The main functionality of the chatbot is to provide relevant information about a gastronomic business.