

Reference Paper

1. " Priming Jobs as Skill Development Opportunities and Responses to Job Postings"

Drewery, David & Pretti, T. & Nettinga, Jamie. (2022). Priming Jobs as Skill Development Opportunities and Responses to Job Postings. *Canadian Journal of Career Development*. 21. 4-16. 10.53379/cjcd.2022.337.

Many inexperienced job seekers adopt a focused job search strategy in which they disregard job postings that seem unrelated to their interests. Yet, many of the jobs that they disregard during their job search could have been relevant to such interests because they offer opportunities for skill development. Counterintuitively, an exploratory job search can help such job seekers find and pursue more relevant jobs. In an experiment ($N = 122$), we examined the effect of priming seemingly irrelevant jobs as skill development opportunities on inexperienced job seekers' responses to job postings. Compared to those who did not receive the prime, those who received the prime reported higher perceived job relevance and, in turn, perceived job attractiveness for subsequently viewed job postings. The results suggest that career educators could use peer-to-peer learning, or public reflection, to encourage students to share insights with each other, reframe the meanings of job relevance, and pursue more relevant jobs.

2."An Automated Recommendation Approach to Selection in Personnel Recruitment"

Färber, Frank & Weitzel, Tim & Keim, Tobias. (2003). An Automated Recommendation Approach to Selection in Personnel Recruitment.. 302.

Many online recruitment platforms suffer from the inappropriateness of Boolean search methods for matching candidates with job requirements. While such platforms have so far been a successful means for decreasing personnel advertising cost, the huge amount of electronic candidate profiles has not yet been exploited to optimize search quality. In this paper, using findings from an empirical survey on modern recruitment practices among Germany's top 1,000 enterprises and supported by findings from personnel selection theory, we identify a gap between the actual requirements of matching people with jobs and current e-recruitment procedures. Based on information systems research and drawing from selection and assessment theory, a framework for developing new matching methods is proposed. We describe the elements of a matching method using a probabilistic automated recommendation approach and then present first quite promising results from applying the algorithm to synthetic data.

3.” Job Recommendation based on Job Profile Clustering and Job Seeker Behavior”

Mhamdi, D. & Moulouki, R. & Ghoumari, M. & Azzouazi, M. & Moussaid, L.. (2020). Job Recommendation based on Job Profile Clustering and Job Seeker Behavior. *Procedia Computer Science*. 175. 695-699. 10.1016/j.procs.2020.07.102.

This article presents a recommender system that aims to help job seekers to find suitable jobs. First, 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.

4.” Job Recommendation System based on Text Analysis”

D. Mhamdi, R. Moulouki, M. Y. El Ghoumari, and M. Azzouazi. (2020) “Job Recommendation System based on Text Analysis.” *Jour of Adv Research in Dynamical & Control Systems*, Vol. 12, 04-Special Issue

This article presents a job recommender system suggesting pertinent candidates for an offer posted by a recruiter. To accomplish this task, the data is collected from job recruiting websites then it is prepared through the extraction of appropriate attributes such as job titles, skills and experiences required for the targeted occupation. In a simple way, a job offer can be considered as a document mainly composed of two parts: a title and a job description. The title summarizes the role or position offered by the employer. The description usually provides the position details, including all the required relevant skills, according to the employer specifications. The proposed recommender system is based on the classification of job profiles. We first extract meaningful features from data by transforming noisy and unstructured textual data into structured formats, so it can be handled more clearly using text analysis algorithms based on topic modeling approach. The structured and cleaned data from job offers is matched with the data from resumes and a weighting of main attributes is set up before rendering the result as sorted recommendations.