

LITERATURE SURVEY

PAPER TITLE	METHOD	MERITS	DEMERITS	PAPER LINK
Skill Scanner: Connecting and Supporting Employers, Job Seekers and Educational Institutions with an AI-based Recommendation System	Combines NLP techniques to extract, vectorize, cluster and compare skills in a pipeline and outputs statistics and recommendations for all three players in form of reports	<ul style="list-style-type: none"> • Help employers, job seekers and educational institutions adapt to the job market's needs 	<ul style="list-style-type: none"> • Requires educational institute data like syllabus, lesson plans, etc • Returns reports which might be tedious to read 	https://bit.ly/3L7mdrX
Recommendation of Job Offers Using Random Forests and Support Vector Machines	Random Forest and Support Vector Machines	<ul style="list-style-type: none"> • Automatically recommend job offers • Efficiently works at web scale, in large databases or with large instances. 	<ul style="list-style-type: none"> • SVMs work with models hard to interpret by humans • Does not use textual description from job offers 	https://www.jorge-mar.com/papers/Recommendation-Job-Offers.pdf
A Machine Learning approach for automation of Resume Recommendation	Using Content-based Recommendation, using cosine similarity and by using k-NN to identify the	<ul style="list-style-type: none"> • Effectively captures the resume insights and their 	<ul style="list-style-type: none"> • Accuracy is only 78% 	https://www.sciencedirect.com/science/article/pii/S187705092030750X

system	CVs that are nearest to the provided job description	semantics.		
Enhanced DSSM (deep semantic structure modeling) technique for job recommendation	Deep Semantic Structure Algorithm	<ul style="list-style-type: none"> Word embeddings are used which don't require expensive annotations. 	<ul style="list-style-type: none"> Words with multiple meanings are conflated into a single representation 	https://www.sciencedirect.com/science/article/pii/S1319157821001853
Technical Job Recommendation System Using APIs and Web Crawling	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 jobs.	<ul style="list-style-type: none"> Allows users to study job popularity, skill demand, etc 	<ul style="list-style-type: none"> This paper uses collaborative filtering which faces well-known problems of privacy breaches and cold start. Crawling process is not automated. 	https://www.hindawi.com/journals/cin/2022/7797548/