Ideation Phase
Literature survey

Date	17 October 2022
Team ID	PNT2022TMID16689
Project Name	Skill / job recommender application
Maximum Marks	4 Marks

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	Help employers, job seekers and educational institutions adapt to the job market's needs	Requires educational institute data like syllabus, lesson plans, etc Returns reports which might be tedious to read	https://bit.ly/3L7mdrX
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	Allows users to study job popularity, skill demand, etc	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/
Enhanced DSSM (deep semantic structure modeling) technique for job recommendation	Deep Semantic Structure Algorithm	Word embeddings are used which don’t require expensive annotations	Words with multiple meanings are conflated into a single representation	https://www.sciencedirect.com/science/article/pii/S1319157821001853
Recommendation of Job Offers Using Random Forests and Support Vector	Random Forest and Support Vector Machines	Automatically recommend job offers	SVMs work with models hard to	https://www.jorgemar.com/papers/Recommendation-Job-Offers.pdf

Machines		Efficiently works at web scale, in large databases or with large instances.	interpret by humans Does not use textual descriptio n from job offers	
A Machine Learning approach for automation of Resume Recommendation system	Using Content-based Recommendation, using cosine similarity and by using k-NN to identify the CVs that are nearest to the provided job description	Effectively captures the resume insights and their semantics	Accuracy is only 78%	https://www.scienc edirect.com/scienc e/article/pii/S187 705092030750X