## LITERATURE SURVEY - SKILL AND JOB RECOMMENDER APPLICATION

| Date          | 19 September 2022         |
|---------------|---------------------------|
| Team ID       | PNT2022TMID53971          |
| Project Name  | Skill and Job Recommended |
| Maximum Marks | 4 Marks                   |

| YEAR | TITLE   | AUTHOR   | PROBLEM<br>STATEMENT   | TECHNIQUE   | PROS  | CONS  |
|------|---|--|--|---|---|---|
| 2018 | Job<br>Recommendation<br>based on Job<br>Seeker Skills  | I. Jorge Valverde - Rebaza ii. Ricardo Puma iii. Paul Bustios iv. Nathalia C. Silva                  | Although in the literature exists a variety of techniques and strategies used as part of job recommender systems, most of them fail to recommend job vacancies that fit properly to the job seekers profiles.  | Text processing and recommendatio n methods   | making publicly<br>available a new<br>dataset<br>containing job<br>seekers profiles<br>and job<br>vacancies | focus on performing a more exhaustive evaluation considering a greater amount of methods and data as well as comprehensive evaluation of the impact of each professional skill of a job seeker on the received job recommendation |
| 2018 | A Combined<br>Representation<br>Learning<br>Approach<br>for Better Job<br>and Skill<br>Recommendation | i. Vachik S. Dave ii. Baichuan Zhang iii. Mohammad Al Hasan iv. Khalifeh AlJadda v. Mohammed Korayem | An excellent job recommender system not only enables to recommend a higher paying job which is maximally aligned with the skill-set of the current job, but also suggests to acquire few additional skills which are required to assume the new position | i. Job-transition<br>network<br>ii. Job-skill<br>network<br>iii. Job -<br>occurrence<br>network | i. Pairwise Ranking Objective  ii. Providing high quality job recommendation                                | Skill-gap<br>accurate<br>identification skill<br>match  |
| 2018 | Talent Search and<br>Recommendation<br>at Linkedin  | i. Sachin Cem<br>ii. Geyik Ketan<br>Thakkar  | The talent search<br>system could be<br>quite complex<br>combining several<br>structured fields  | Talent Search<br>Recommendati<br>on<br>Candidate<br>Retrieval and<br>Ranking                    | Recruiters can<br>search the<br>candidates for<br>the job openings  | The recruiter or<br>HR may not able<br>to express their<br>hiring needs in<br>the form of a<br>search query(ob<br>posting)  |

| 2019 | Tripartite Vector<br>Representations for<br>Better Job<br>Recommendation       | i. Mengshu Liu ii. Jingya Wang iii. Kareem Abdelfatah iv. Mohammed Korayem | To match the right person with the right job, a good representation of job postings is required. Such representations should ideally recommend jobs with fitting titles, aligned skill set, and reasonable commute. | Graph by the combination of title, skill and location   | This allows us to gain a representation of job postings/ resumes using both elements, which subsequently can be combined with location.               | Develop an inductive learning framework to accommodate newly emerged job titles and skills and representation vectors only exist if it is in the input graph |
|------|--|--|---|---|---|--|
| 2019 | The AI Behind<br>LinkedIn Recruiter<br>search and<br>Recommendation<br>Systems | i. QiGuo<br>ii. Sachin Cem<br>Geyik  | It uses existing information in your profile  | i. Non-linear<br>modeling with<br>Gradient<br>Boosted<br>Decision Trees<br>ii. Deep<br>learning | Easily attach<br>your LinkedIn<br>resume to any<br>job application  | i. Getting spam messages ii. Taking too much time while using iii. There is no opportunity for reference   |
| 2019 | A-Map Based Job<br>recommender<br>Model  | i. Manal Aliyhieth<br>ii. Amal A.<br>Shargabi                              | People often search<br>their job openings<br>on a particular<br>website. Many of the<br>system does not<br>offer mapping<br>support   | Content-Based<br>recommendatio<br>n Location<br>Based Search                                    | This system provides the mapping support in order to increase the job search  | Sometimes<br>complicated to<br>understand the<br>map that was<br>provided  |
| 2020 | Efficient and<br>Scalable job<br>Recommender<br>System                         | i. Ravita Mishra ii. Sheetal Rathi   | Incomplete<br>Description,<br>Information overload  | i. Collaborative content ii. Graph-based filtering  | In this technique, the user can access the information he/she may have been interested in the past.  Accuracy, measure application domain efficiency. | Lack of good<br>evaluation<br>measure,<br>scalability,<br>privacy and<br>security  |

| 2020 | Job<br>Recommendation<br>Profile Clustering<br>and Job Seeker<br>Behavior            | i. Mhamdi.D<br>ii. Azzouazi.M   | In Big Data, both<br>employees and job<br>seekers are<br>confronted with<br>increasing data<br>overload and time<br>consuming   | K-clustering<br>Profile<br>Clustering | Job offers can<br>be collected from<br>the websites.<br>Job offers can<br>be divided into<br>Job clusters<br>based on the<br>features   | i. Increasing data<br>overloaded<br>ii. Time<br>consuming<br>process                     |
|------|--|---|---|---------------------------------------|---|--|
| 2021 | Implementation<br>K-Means<br>Clustering Method<br>in Job<br>Recommendation<br>System | I. Betty Dewi<br>Puspasari<br>ii. Betty Dewi<br>Puspasari<br>iii. Andy<br>Pramono<br>iv. Aang Kisnu<br>Darmawan | Finding job vacancies is a problem for students who have just completed their studies in higher education because they still do not have work experience so they are required to look for jobs that really match their criteria | K-Means<br>Clustering<br>method       | This application can provide solutions to companies and applicants in finding workers or jobs using a recommendation system   | With the different representations of the data, the results achieved are also different. |
| 2022 | Job<br>Recommendation<br>System Using<br>Hybrid<br>Filtering                         | i. Aneesh Mulay, ii. Shriyash Sutar iii. Jiten Patel iv. Aditi Chhabria, v. Snehal Mumbaikar                    | Many fresher candidates face issues while job recruitment process to undergo which field of interest.   | Hybrid Filtering                      | The application will be user friendly and the user just has to fill in basic details such as his past years of experiences, project, internship, etc.  The rest of recommending the job to the users will be done safely by the recommendation model of this project. | content-based<br>and collaborative<br>approach have<br>their own<br>disadvantages        |