

Job Recommendation for Daily Paid Workers using Machine Learning

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Abstract: In the last years, job recommendation systems have become popular since they successfully reduce information overload by generating personalized job recommendation. One such field where recommender frameworks can play a vital role is to help unskilled workers who works on daily wages basis by recommending a job based on their skills and interest. In the current scenario, with an abundance of different industries and fields, a huge number of jobs are available for the skilled and literate professionals. It is not difficult to find suitable jobs for a person after his field has been identified but the main obstacle for achieving this goal is lack of information and awareness. The problem is that there is no such relevant recommendation system available currently soalso the one particular challenge is the presence of various third parties between the job seeker and the desired employment opportunity. These intermediaries can complicate the job search process. To address this issue, we proposed the "Job recommendation system for daily paid workers" by analysing the skills of a particular worker and then finding appropriate jobs in his area of expertise. By eliminating the involvement of third-party intermediaries, we aim to establish a direct connection between the worker and the desired job. To make this system even more robust, a wide variety of factors are taken into consideration while recommending jobs to workers.

Keywords: Recommendation System, Content-based recommendation, K-Means Clustering, Machine Learning

REFERENCES

- [1]. .B. D. Puspasari, L. L. Damayanti, A. Pramono, and A. K. Darmawan, "Implementation KMeans Clustering Method in Job Recommendation System," in 20217th International Conference on Electrical, Electronics and Information Engineering (ICEEIE), 2021, pp. 1-6.
- [2]. S. R. Rimitha, V. Abburu, A. Kiranmai, and K. Chandrasekara, "Ontologies to Model User Profiles in Personalized Job Recommendation," in 2018 IEEE Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER), 2018, pp. 280-284.
- [3]. N. D. Almalis, G. A. Tsihrintzis, N. Karagiannis, and Strati, "FoDRA — A new content-based job recommendation algorithm for job seeking and recruiting," in 2015 6th International Conference on Information, Intelligence, Systems and Applications (IISA), 2015, pp. 1-5.
- [4]. K. Jalan and K. Gawande, "Context-aware hotel recommendation system based on hybrid approach to mitigate cold-start-problem," in 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS), 2017, pp. 3227-3232.
- [5]. K. Appadoo, M. B. Soonnoo, and Z. Mungloo Dilmohamud, "JobFit: Job Recommendation using Machine Learning and Recommendation Engine," in 2020 IEEE Asia-Pacific Conference on Computer Science and Data Engineering (CSDE), 2021, pp. 34-38.
- [6]. Q.-D. Nguyen, T. Huynh, and T.-A. Nguyen Hoang, "Adaptive methods for job recommendation based on user clustering," in 2016 3rd National Foundation for Science and Technology Development Conference on Information and Computer Science (NICS), 2016, pp. 182-187.
- [7]. Nigam, A. Roy, H. Singh, and H. Waila, "Job Recommendation through Progression of Job Selection," in 2019 IEEE 6th International Conference on Cloud Computing and Intelligence Systems (CCIS), 2019, pp. 361-365.

- [8]. G. Khanvilkar and D. Vora, "Smart Recommendation System Based on Product Reviews Using Random Forest," in 2019 International Conference on Nascent Technologies in Engineering (ICNTE), 2019, pp. 1-5.
- [9]. W. Hong, S. Zheng, and H. Wang, "Dynamic user profile-based job recommender system," in 2013 8th International Conference on Computer Science and Education, 2013, pp. 905909.
- [10]. V. Yadav, U. Gewali, S. Khatri, S. R. Rauniyar, and A. Shakya, "Smart Job Recruitment Automation: Bridging Industry and University," in 2019 Artificial Intelligence for Transforming Business and Society (AITB), 2019, pp. 39-43.