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**JOB RECOMMENDATION SYSTEM USING SENTIMENT
ANALYSIS & PREFERENCE ADJUSTMENT**

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I. ABSTRACT

In the current job market, personalized job recommendation systems have become a popular tool for job seekers to find suitable job openings. However, such systems often fail to consider the credibility of the employers, which can have a significant impact on the job seeker's career. The problem addressed in this research is the lack of employer credibility checks in job recommendation systems.

The research suggests a content-based job recommendation system to solve this issue by calculating the employer's sentiment score using sentiment analysis methods. The sentiment score is determined using reviews and ratings submitted by the employer company's current and former employees. The suggested system makes use of NLP techniques like data preprocessing, Vader Lexicon Score calculation, word-based sentiment analysis, and a Support Vector Machine Classifier model. The model was chosen from a pool of artificial intelligence algorithms trained on the English Google News 7B corpus. In order to rank job recommendations, the sentiment score is then combined with the similarity matrix and pairwise distance to calculate a weighted ensemble score.

Based on user evaluations and the evaluation matrix for the developed algorithms, the prototype of the proposed system produces usable results. This research has successfully implemented a novel approach that integrates sentiment analysis to check employer credibility in job recommendation systems. The proposed system offers useful information that helps job seekers choose their careers wisely.

Keywords: Recommendation System, Hybrid Recommendation Systems, Job Recommender, Machine Learning, Sentiment Analysis