SMART RECRUITER – ASPECT BASED SENTIMENT ANALYSIS FOR CV SHORTLISTING IN IT INDUSTRY

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Abstract

Recommendation systems are a popular and favorable in many industries such to recommend movies, fashion or even institutes. But this concept has not been applied to select people. This can be a useful in the recruitment process, to help shortlist CV's to filter out the best candidates as recommendations to companies. This in turn could reduce a lot of hassle done for the HR team. HR managers may have to analyze and evaluate 10 resumes for the job. Assuming an average 5 minutes for a resume, HR managers may have to spend more than 75 000 hours for evaluation and shortlisting of resumes. Apart from the efforts, the human evaluation of the resume is not accurate due to the incompleteness of the resume comparing part.

Therefore, the project aims to research, design, develop and evaluate an aspect-based sentiment
analyzer system which will analyze the applicant's social media profiles and CV to identify
aspects that the IT companies need, and which will help companies to select the right person to interview for their desired position. Sentiment analysis and analyzed information was based on two perspectives which is personality and education. By conducting a thorough literature survey to was identified that similar systems of CV shortlisting does not make use of aspect-based sentiment analysis, this creates the research gap, emphasizing the need for a suitable proposed system to be designed and implemented. Therefore, the author came up with a system called "Smart Recruiter".

Keywords:
Aspect-based Sentiment Analysis, Machine learning, Natural Language Processing, Text Classification