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Aspect Based Sentiment Analysis for Evaluating IT Pioneers in Providing

Good Learning Culture for IT Interns

partial fulfilment of the requirements for the
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A dissertation by

Ms. Sivanjah Anantharajah (2014127/ W1583036)

Supervised By

Mrs. Aloka Fernando

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Abstract

The World Wide Web such as social networks, forums, review sites and blogs generate enormous heaps of data in the form of user's views, emotions, opinions and arguments about different social events, products and brands. More and more people, now-a-days, make their purchase decision by referring to reviews and ratings provided in the online platform. It is evident that the users to IT Company use this facility in a larger scale compared with the users of other industries. However, evaluating the information so gathered, is a hazel and time consuming as it involves a process of reading through all the reviews, identifying the aspect of the review and understanding sentiment of the aspect before making the decision.

Sentiments of users that are expressed on the web has great influence on the readers and product vendors. The unstructured form of data from the social media is needed to be analyzed and well-structured and for this purpose, aspect-based sentiment analysis has recognized significant attention. Sentiment analysis is referred as text organization that is used to classify the expressed mind-set or feelings in different manners such as negative, positive, favorable, unfavorable, thumbs up, thumbs down, etc.

For this problem, proposed solution the users are able to extract a summarized analysis of the reviews solution by identifying aspects and aspects including **Supportive environment, Leadership, learning process** which are the main aspect categories considered when analyzing the IT Company reviews. The challenge for sentiment analysis is lack of sufficient labeled data in the field of Natural Language Processing (NLP). And to solve this issue, the sentiment analysis and Deep learning techniques have been merged because Deep learning models are effective due to their automatic learning capability. The system makes utilize of Natural Language Processing, Deep Learning and Sentiment Analysis concepts to provide the highest accurate sentiments expressed by the IT employees in reviews to present the end users with accurate and effective summarized outcome of the IT Company and aspect of it.

This enhanced proposed solution uses Natural Language Processing and Sentiment analysis to identify the thoughts of the user regarding the IT Company. This will be a web-based solution that gives an overall idea of the current performance of a particular IT Company that will guide the users to choose an IT Company based on the overall rating and aspect's sentiment rating with minimum hazel and time.

Key Words:

Natural Language Processing, Deep Learning, Aspect Based Sentiment Analysis, Online reviews

Subject descriptors:

- Computing methodologies~Artificial intelligence
- Computing methodologies~Natural language processing
- Computing methodologies~Information extraction
- Information systems~Sentiment analysis