ABSTRACT

In this fast-paced technological development, travelers (tourists) can easily find information about hotels. One of them is on the TripAdvisor website. However, from the available reviews, many reviews do not contain certain aspects. Hence the need for multi- aspect sentiment analysis for TripAdvisor hotel reviews. The system created in this research is a system for multi-aspect sentiment analysis using the Random Forest and Word Embeddings methods. In this research, we also tested the Word Embeddings method with the best results based on accuracy and running time efficiency. The Word Embeddings methods tested were Word2Vec and GloVe. The results showed that Word2Vec gave an average accuracy of 93.73%, slightly higher than GloVe which reached 93.65%. However, there is a notable difference in processing time, Word2Vec only takes less than two seconds, while GloVe takes more than 26 minutes. These findings suggest that Word2Vec is more suitable for applications that require high processing speed, while GloVe is more suitable for analyses that require broader semantic understanding, although at the price of longer processing time.

Keywords: *multi-aspect sentiment analysis, Random Forest, word2vec, GloVe*