ABSTRACT

Using Long Short Term Memory for Context Based Approach of Sarcasm Detection in Twitter.

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Sarcasm is a word that has the opposite meaning of what is said that is used to mock or show resentment. The opposite meaning contains a positive sentiment which is followed by negative sentiment. This research proposed sarcasm detection by considering its context. The context is related to the words or phrases in tweets. To collect the related context and to simplify the process of finding contextual meaning, extracting information context was conducted using paragraph2vec. The result of paragraph2vec was used to help the process of classification in Long Short Term Memory (LSTM).

This research applied a sarcasm detection method to recognize sarcasm in the Indonesian language. The reliability and the effectiveness of sarcasm detection were measured by increased percentages of TP (True Positive) and by decreased FP (False Positive) and FN(False Negative), the result of the experiment obtains an accuracy of 88.33 % with recall 90.98%. This proposed method surpasses Bouazizi & Ohtsuki method in both accuracy and recall by more than 8% accuracy, 16% recall on the same Indonesian dataset, and even more 9 % accuracy, 26 % recall on the same English dataset.

KEYWORDS: Sarcasm detection, lstm, paragraph2vec, context, deep learning