Mariam Biltawi, Ghazi Al-Naymat and Sara Tedmori, "Arabic Sentiment Classification: A Hybrid Approach," in 2017 International Conference on New Trends in Computing Sciences, Amman, Jordan, 2017.

Abstract

This paper proposes a sentiment analysis approach for the Arabic language that combines lexicon based and corpus based techniques. The main idea of this approach is to represent the review for the corpus-based approach in the same way it is seen in lexicon-based approach, through replacing the polarity words with their corresponding label Positive 'POS' or Negative 'NEG' in the lexicon, this way the terms that are important but rare can be taken into consideration by the classifier. A comprehensive comparison is conducted using different classifiers, and experimental results showed that the proposed hybrid approach outperforms the corpus-based approach and the highest accuracy reached 96.34% using random forest classifier with 6-fold cross validation.