

Performance Evaluation of an Ontology-Based Arabic Sentiment Analysis

Authors : Salima Behdenna, Fatiha Barigou, Ghalem Belalem

Abstract : Due to the quick increase in the volume of Arabic opinions posted on various social media, Arabic sentiment analysis has become one of the most important areas of research. Compared to English, there is very little works on Arabic sentiment analysis, in particular aspect-based sentiment analysis (ABSA). In ABSA, aspect extraction is the most important task. In this paper, we propose a semantic aspect-based sentiment analysis approach for standard Arabic reviews to extract explicit aspect terms and identify the polarity of the extracted aspects. The proposed approach was evaluated using HAAD datasets. Experiments showed that the proposed approach achieved a good level of performance compared with baseline results. The F-measure was improved by 19% for the aspect term extraction tasks and 55% aspect term polarity task.

Keywords : sentiment analysis, opinion mining, Arabic, aspect level, opinion, polarity

Conference Title : ICAISC 2021 : International Conference on Advances in Intelligent Systems and Computing

Conference Location : Tokyo, Japan

Conference Dates : October 07-08, 2021