Modified framework for sarcasm detection and classification in sentiment analysis

ABSTRACT

Sentiment analysis is directed at identifying people's opinions, beliefs, views and emotions in the context of the entities and attributes that appear in text. The presence of sarcasm, however, can significantly hamper sentiment analysis. In this paper a sentiment classification framework is presented that incorporates sarcasm detection. The framework was evaluated using a nonlinear Support Vector Machine and Malay social media data. The results obtained demonstrated that the proposed sarcasm detection process could successfully detect the presence of sarcasm in that better sentiment classification performance was recorded. A best average F-measure score of 0.905 was recorded using the framework; a significantly better result than when sentiment classification was performed without sarcasm detection.