

Documents Emotions Classification Model Based on TF-IDF Weighting Measure

Authors : Amr Mansour Mohsen, Hesham Ahmed Hassan, Amira M. Idrees

Abstract : Emotions classification of text documents is applied to reveal if the document expresses a determined emotion from its writer. As different supervised methods are previously used for emotion documents' classification, in this research we present a novel model that supports the classification algorithms for more accurate results by the support of TF-IDF measure. Different experiments have been applied to reveal the applicability of the proposed model, the model succeeds in raising the accuracy percentage according to the determined metrics (precision, recall, and f-measure) based on applying the refinement of the lexicon, integration of lexicons using different perspectives, and applying the TF-IDF weighting measure over the classifying features. The proposed model has also been compared with other research to prove its competence in raising the results' accuracy.

Keywords : emotion detection, TF-IDF, WEKA tool, classification algorithms

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020