

NADE: Natural Affect Detection

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Abstract

Emotions are at the core of social interaction and play a central role in consumer behavior. Although social media has emerged as a main channel to express ourselves, extracting emotions from texts is challenging and often limited to rather simplistic bipolar sentiment scores. A more differentiated measurement is complicated by various challenges such as short texts and poor speech quality (e.g., typos, use of slang). To tackle these issues, we present a framework with the central idea of utilizing emojis as an intermediate language. It consists of two stages: 1) a classification predicts a vast array of emojis based on text, and 2) a reduction of predicted emojis to an established set of eight emotions. We demonstrate the performance of the proposed method by predicting the success of movies based on the emotionality of pre-launch online buzz. The application exemplifies the advantages of considering a more differentiated set of emotions.

Keywords: *Affect Detection; Basic Emotions; Sentiment Analysis*

Track: Methods, Modelling & Marketing Analytics