Text Emotion Detection using Deep Learning

Abstract:

Nowadays, most people have access to the Internet for text, image, audio, and video communication in today's technologically advanced world. Individuals from varying backgrounds share knowledge about current events and use social media to express their opinions. By examining their emotions, it is necessary to comprehend and identify the behavior of such vast amounts of textual data on individuals. This research leverages data from one of the most widely used social media platforms, Twitter, to extract emotions from both historical and real-time feeds.

The required English-language Twitter data is transformed into a vector of eight emotions, and label identification of one of the fundamental emotion families is done using supervised learning techniques including K-means, Naive Bayes, and SVM. Finally, a comparative analysis of the various classifiers' performances is covered.

Keywords— sentiment, machine learning, emotion detection, twitter, SVM, Naive Bayes