Abstract

Humans are inseparable from emotions, emotions fill human life at all times. Emotions have an impact on social relationships, memory and decision-making. In the era of this research, humans tended to express emotions through social media such as Twitter in the form of videos, images and text. Over time, social media has become an important part of most people's lives. Human emotion is a research area that is widely researched, especially in the field of linguistics. In this study, we classified emotions with Convolutional Neural Network. In addition, we compared the performance with three different word embedding method, Glove, word2vec, and fastText in classifying the given dataset. The dataset that we used were 4403 tweets which will be classified into 5 classes, namely: love, joy, anger, sadness, and fear. F1-score is employed as an evaluation metric. The results of our experiments show that the combination of CNN and word2vec can achieve 72.06% of F1-score, which increases the baseline model by 63.71%.

Keywords: Emotion Classification, Convoutional Neural Network, Twitter, Word Embedding, Twitter Emotion Dataset