

Abstract

Depression is a mental disorder in a person. It is estimated that around 300 million people suffer from depression worldwide. Due to the absence of medical treatment in the early stages. By using social media such as Twitter, it becomes a place to express feelings or emotional conditions experienced through posts. From these posts or tweet data, clues can be found that the user is depressed or not. In this study, the Convolutional Neural Network (CNN) algorithm is used to create a model for classifying text that can make predictions to detect a post on Twitter has an emotional form that can be predicted whether a person indicates depression or not. The data collected is sourced from the results of filling out questionnaires by respondents, and tweet data is obtained from Twitter user accounts that have been approved. The development of this system has been carried out until the testing stage, the resulting model for predicting emotions has an accuracy of 82% and for predicting depression it has an accuracy of 91% which was tested with 4892 tweets from 161 users and described by a confusion matrix as a performance measurement tool.

Keywords: Depression, Emotional, Post, Convolutional Neural Network (CNN)