

## **ABSTRACT**

*Twitter is one of the social media that the Indonesian people widely use, which covers more than 61 percent of the total social media users in Indonesia. Twitter is a social media used by many people to express their thoughts, interests, and opinions on many things. These opinions, of course, have varying values, some are positive, negative, or neutral. These views and opinions can be used as a source of data to assess sentiment on a topic on Twitter. The COVID-19 pandemic, a disease caused by the spread of the virus from human to human, is still a matter of discussion whether this disease has disappeared or is still a concern for the public. To prevent the spread of COVID-19 and the dangers that will arise if it is not treated immediately, one way to prevent the spread of this virus outbreak is to develop a vaccine. The COVID-19 vaccine regulation set by the government in Indonesia is a new thing for the community, giving rise to various opinions and views expressed by the public through Twitter social media. People share their comments on social media twitter about the existence of a COVID-19 vaccine. Therefore, the researcher wants to conduct sentiment analysis to find out whether the trend of public comments on the COVID-19 vaccine is positive, negative, or neutral. In executing a sentiment analysis to find out the response of twitter users to the COVID-19 vaccine, the researcher uses a classification algorithm, and the author will check the accuracy value using the K-Nearest Neighbor algorithm. The stages carried out in this research are by preprocessing data, data processing, classification, testing the variation of the k value, and evaluation. The resulting model will be tested and evaluated by looking at the accuracy, precision, and recall values. The accuracy results obtained using TF-IDF extraction are 56.82%. Sentiment analysis obtained in this study shows that Twitter users in Indonesia are more likely to provide neutral comments.*

**Keywords:** *Twitter, COVID-19 Vaccine, Sentiment Analysis, Classification.*