

## **ABSTRACT**

*At the end of 2019, the world was shocked by the emergence of a disease caused by the SARS-CoV-2 virus which is the newest type of coronavirus. The disease caused by the SARS-CoV-2 virus is known as COVID-19. The spread and transmission of this disease is quite extensive and fast. In a short time, this disease began to spread to all corners of the world, including Indonesia. With such a high level of spread and the absence of a vaccine for COVID-19, it has caused chaos in the community. This affects many sectors of people's life, starting from the economy, education, industry, medical and also social life. Not a few people are now actively socializing in media and writing their opinions, opinions and thoughts on social media platforms such as Twitter. The occurrence of this pandemic prompted the public to write their opinions, thoughts and opinions towards COVID-19 on Twitter. A sentiment analysis model is needed to classify public tweets on Twitter into positive and negative ones. Sentiment analysis is part of Natural Language Processing which creates a system to recognize and extract opinions in text form. In this study, the Naive Bayes and K-Nearest Neighbor algorithms were used to build a sentiment analysis model of Twitter users' tweets against COVID-19. To validate the algorithm performance, K-Fold Cross Validation is used. The accuracy is 85% for the Naïve Bayes algorithm and 82% for the K-Nearest Neighbor algorithm at values of  $k = 6, 8, \text{ and } 14$ .*

**Keywords :** *COVID-19, Twitter, Sentiment Analysis, Natural Language Processing (NLP), Naive Bayes, K-Nearest Neighbor.*