

## **ABSTRACT**

*Cryptocurrencies have emerged in recent years and have continued to grow until they have become very popular, widespread, and surrounded by various pros and cons of their innovative developments. This study uses sentiment analysis on Twitter towards cryptocurrencies to create positive and negative trends based on comments by classifying data on Twitter. The dataset used is a Tweet related to cryptocurrency in June 2022. The dataset goes through the stages of preprocessing, labeling, imbalance handling, train test split, TF-IDF weighting and processed with the SVM algorithm. This research resulted in sentiment analysis based on the TextBlob library to determine positive sentiment and negative sentiment. The accuracy of the application of SVM in this study is known through the use of k-fold cross validation and three methods, namely undersampling, without imbalance handling and oversampling and three comparisons of train test splits, namely 90:10, 80:20, and 70:30. In k-fold cross validation, an accuracy of 93.19% was obtained. While the other tiga methods, obtained three highest accuracy where the accuracy is in a ratio of 80:20, namely 94.64% for undersampling, 93.42% for data without imbalance handling, and 93.40% for oversampling. The best accuracy is in the data that goes through the undersampling process with a ratio of 80:20 which is of 94.64%.*

**Keyword—Sentiment Analysis, Bitcoin, SVM, Support Vector Machine, Cryptocurrency.**