## **ABSTRACT**

## ANALYSIS OF PUBLIC OPINION SENTIMENT ON VIRAL CASES OF POLICE INSTITUTIONS ON TWITTER USING RANDOM FOREST METHOD

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Twitter is one of the social media communications that is often used by the general public to interact with each other through text messages called Tweets. Tweets can contain someone's opinions or comments on certain topics, such as topics that are currently being discussed that contain pros and cons to society. Communities can follow the development of a current issue and can provide opinions that can be seen by other communities. As is currently the issue that is being paid attention to by the public on social media regarding negative cases that bring the good name of the Indonesian police. From this case the police can use social media Twitter as a valid source of data to increase trust in the Indonesian people, by analyzing public opinion on social media, especially Twitter. On this study, the classification of public opinion was carried out using Orange Data Mining software with the Random Forest algorithm method using a data set of 10,000 tweets taken from Twitter. The tweets are divided into three classes, namely positive class, neutral class, and negative class. From the results of research using Orange Data Mining, 8.313 community data had negative opinions about viral cases on Twitter by unscrupulous members of the police, then 475 people had neutral opinions and 1.212 people had positive opinions. For the results of testing the classification model with three scenarios, the highest results were obtained from the 90:10 data splitting with an Accuracy value of 74%, F1-Score of 70%, Precision of 73% and Recall of 74%.

Keyword: Sentiment Analysis, Random Forest, Text Mining, Twitter, Police.