

## **Abstract**

**Hoax are news that is spread without knowing the truth or the facts. Hoax are usually spread through easily accessible media such as Facebook, Twitter and others. Especially during the presidential election, the pair of candidates for president and vice president used social media to carry out campaigns. This is certainly used by people who are not responsible for spreading hoax news. Therefore, it is necessary to identify hoax tweets related to the 2019 presidential election so that people can avoid hoax. The method used for hoax identification is Naïve Bayes Classifier (NBC). The NBC method was chosen because it has been proven effective for text categorization, the process is simple, fast and has high classification accuracy. The tweet data used was 500 tweets with 143 hoax tweets and 357 non-hoax tweets. The results show that NBC with additional Mutual Information (MI) and Information Gain (IG) feature selection can produce a precision value of 0.974, a recall of 0.9146, and an F1 score of 0.9433 while an NBC without a feature selection produces a precision value of 0.6932, a recall of 0.9531, and F1 score of 0.8026, in other words feature selection can increase the value of F1-score of 0.1408.**

**Keywords: hoaks, presidential elections, tweets, Naïve Bayes Classifier.**