

ABSTRACT

The use of technology will always be followed by negative and positive on its use including such as social media twitter, facebook, and instagram. Many cases such as kidnapping, defamation, fraud to the spread of a misguided understanding. *Hoax* is one of the negative things that often occur in social media, news in *hoax* still doubt the truth or fact. The use of *Backpropagation* methods on the prediction and classification of data can be used to predict the possibility of a twitter account user spreading a *hoax* news based on the user's behavior. Testing data is done based on the content of tweets and user behavior. Data sets are arranged based on attributes used such as the number of followers, following, number of tweets and the activity of the user that impact on the receipt and spread of a news. The data sets are used for training on *Backpropagation* using gradient descent *Backpropagation* and levenberg-marquadt *Backpropagation* algorithms. After the training process is complete the training results are tested to recognize 4 types of input patterns. The test results are then compared to see the advantages and disadvantages of both *Backpropagation* algorithms. In the process of testing conducted by levenberg-marquadt *Backpropagation* method obtained an average accuracy of 72.21% with MSE (0.1979) the lowest compared with *Backpropagation* gradient descent at learning rate with a value of 0.8.

Keywords: *hoax*, twitter, *Backpropagation*, *Neural Network*. *Social media*, *levenberg-marquadt*, *gradient descent Backpropagation*..