ABSTRACK

The development of communication technology nowadays make people can communicate easily. One of the communication technology that is often used is email. Email is a method of digital messages exchange between person who make the message to one or many recipients. Email nowadays is often misused for personal interest, groups or organizations. Sometimes the owner of an email received unwanted messages from the strangers . This kind of email is called as spam email. One way to handle this problem is doing spam filtration based on the content. C4.5 algorithm decision tree learning method can be used to handle these problems. To get a good performance of decision tree, Random Forest ensemble method can be used. Random Forest is using a combination of several decision trees to input the number of features that will be used in the decision tree. The using of the appropriate amount of features will produce good accuracy in filtering spam data or ham.

Key word :*email filtering,decision tree, C4.5 algorithm, ensemble method, random forest, accuracy.*