

## Abstract

Email is a very popular e-mail to exchange messages. Users are free to share and send messages, whether important information or just ordinary messages. Because of the ease in sending messages, for people who are not responsible for messages that are not important in large quantities and continuously both promotional messages, advertisements, service offers until messages are not feasible. This replaces anxiety for Email users because it is very necessary and makes users uncomfortable. In this study, the author developed a classification system for spam email. The method used for classification

Email spam is a Convolutional Neural Network (CNN). In the system, Email will be redeemed by its claim and declare the class classification, namely Email on spam class and Email on ham class. The CNN model matches the actual data and predictive data in announcing the results. The data is divided into two parts by dividing Data Training 80% and testing data 20%. The data used is a file that contains English sentences that can be recognized by the CNN model. In classification, testing using CNN results is higher than ANN, namely training accuracy of 100% and validation accuracy of 98.34%. For ANN results, the training accuracy is 100% and for validation, accuracy is 98.23%. This second method has an accuracy rate of 0.11%.

**Keywords: Email spam classification, Convolutional Neural Network (CNN), Accuracy, Artificial Neural Network (ANN).**