

## **Abstract**

*One communication tool that is easy, cheap and fast is email. The main problem encountered is the increasing number of commercial emails that are not expected or commonly known as spam. Spam has a negative impact such as misuse of bandwidth internet connection, reducing the size of data storage, computing time increases and disadvantaged users with cost and huge time.*

*In this thesis, developed a spam detection system to identify spam email using the Adaptive Neuro Fuzzy Inference System (ANFIS) based on the representation of a set of words. The number of words generated so much so that feature extraction methods used to select words that will be used in the training data in ANFIS network.*

*The results showed that the spam detection system using the Adaptive Neuro Fuzzy Inference System can be applied quite well. Weighting method and the number of words which used to represent words in the ANFIS network affects the level of accuracy in detecting spam email system.*

*Keywords: spam detection, feature extraction, Adaptive Neuro Fuzzy Inference System (ANFIS).*