## **Abstract**

Expanding variety of information technology, the throat, ear and nose disease in patient could be predicted earlier based on the early preliminary of the patient. The aim of developing the system is to check the availability of Artificial Neural Networking (ANN) predicting the disease and not to replace the doctor's work.

This final project a prediction system is built to analyze the disease of the patient based on the preliminary diagnose given by the patient. The System use the Artificial Neural Network with Backpropagation Algorithm to predict the disease.

The testing data based on the Medical record of the disease at 2005-2007. From the Medical database, ANN can predict the disease of a patient by learning the early diagnose. The result of the testing ANN using the practice data have an accuracy of 100% and the result of testing ANN using the testing data have an accuracy of 98,8764% level in throat, ear and nose disease prediction.

**Keyword :** Medical record, backpropagation, throat, ear and nose disease, artificial neural network