## **ABSTRACT**

The development of multimedia systems which is initially have an analog format such as voice, music, and videos, later on converted into digital format, causing the digital data more widely used, giving rise to difficulties in finding data.

This final assignmet created a system of human speech recognition application to request a song using Artificial Neural Network Backpropagation (ANN-BP). The process undertaken for the implementation of the human voice recognition application to request the song is data collection, initial processing, feature extraction and classification using a Artificial Neural Network Backpropagation (ANN-BP). The algorithm used for feature extraction system is Mel Frequency cepstrum Coefficient (MFCC), while for the classification characteristics of the sound patterns that will be used is the Artificial Neural Network Backpropagation (ANN-BP).

The expected results is to show how a system can identify and compare patterns of sound as a medium to call or find a specific song title and can take the right decision of identification at any type of voice patterns. Designed system has a 93 % success rate for identifying the human voice patterns using Backpropagation Neural Network.

Keywords: Artificial Neural Network Backpropagation (ANN-BP), FFT, Mel frequency cepstrum Coefficient (MFCC).