Abstract

Speech recognition is a technology that utilizes the human voice as an input signal to be recognized by the system and then be used for various purposes. In the process the sound of acoustic signals captured by the microphone is converted into digital signal form.

In this final project, the voice feature extraction using LPC methods. LPC take on the characteristics in samples of human voice and then be input to the CMAC neural network learning process. CMAC is a kind of artificial neural networks that try to mimic the pattern behind the human brain works. CMAC will associate each input vector into an association by using the address generator. This address generator that will activate cells of the network weights.

From the test results obtained LPC-CMAC system performance by an average of above 80% for data testing.

***Keywords**: Speech Recognition, Artificial Neural Network, LPC, CMAC.*