

ABSTRACT

Rapid growth in audio processing is felt much help in the development of digital music. The development of digital music on the voice recognition is mainly perceived ease in identifying and testing the accuracy of the desired music. It encourages the creation of voice recognition ease of variations that can be done easily, simple and has good functionality in testing the accuracy of tone and pitch on a song. One of the convenience afforded in this study is an application of testing the accuracy of the human voice humming to a song you want. So it can be used to allow a user to learn to hum the song to find out how much the accuracy of a user in mensenandungkan song.

In this thesis, studied how to test the accuracy of the human voice humming to a song. Characteristic extraction method that has been used is the Harmonic Fast Fourier Transform. Harmonic Fast Fourier Transform is the method adopted perceptual abilities of human auditory system. In the end back propagation Neural Network is used for speech recognition.

In a system using ANN-BP was obtained maximum performance of 80% for the accuracy of the system with data 90 data that the data consists of 60 training and 30 test data. So it can be concluded that ANN-BP method could be used as a method of classifying a title search for its performance a great song.

Keywords: Harmonic Fast Fourier Transform, back propagation Neural Network, voice recognition, accuracy