ABSTRACT

Human emotion is something that sometimes can only be estimated through the expression of a person alone, or of changes in her expression. But it turns out the human emotion can also be detected through the voice was saying. One's emotions in a state of calm, angry, sad or happy speech can be detected through the signal. The development of speech recognition system is still running for the time being. So in this study were analyzed emose someone through speech signals.

At the end of the task to be done is, designed the simulated detection of human emotion through speech signals by performing feature extraction based Discret Wavelet Transform (DWT) and Linear Prediction Coding (LPC) to obtain the basic characteristics of the speech signal. Emotional condition is detected the state will be able to use the method on KNN and variable feature extraction state that becomes the determining parameters.

Of test scenarios against a threshold parameter obtained best parameters is 00:05. After testing the 4-class emotion classification that is neutral, angry, sad, and happy, the highest accuracy was 95% for the number 10 of each class of emotion, the sheer number of test data 5 each emotion class using a threshold value of 0.05 which works maximum crop to eliminate silence the voice, the best frame size of 512 test results are the data of each frame, and the best feature extraction parameters are level DWT 2 value and the value k of KNN is 1.

Keywords : Emotion Detection , Voice conversations , DWT , LPC.