Abstract

Emotion is a very important aspect of human communication. To express emotions one way that humans do and can be identified is through sound. The development of voice detection or speech recognition is a technology that has developed rapidly to help human-machine interactions get better. One of the most commonly used methods for sound detection is Mel-Frequency Cepstrum (MFCC) where sound waves are converted into several types of representations that can be processed, then the parts become determinants of the classification of the Hidden Markov Model (HMM) to issue a coefficient. The emotion class results that are released are still in the form of data that is difficult to read by ordinary users so that it requires a medium that is easy to understand in order to establish human-machine interaction. Based on the human need for the machine, the problem in dealing with it can be in the form of an indicator that can receive input from the results of the emotion detection algorithm and then presented in the form of a light indicator that has a reference to the type of emotion emitted. Furthermore, the tool will also send emotion detection results via e-mail so that the results can be monitored wherever and whenever.

Keywords : emotion, speech recognition, hidden markov model, mel-frequency cepstrum coefficient