

ABSTRACT

Music can affect someone's emotions and expressions. With music, someone can be relaxed just by listening to it. Music that can make someone be relax is jazz. Jazz music that heard by someone would directly cause a reaction in the brain. From the signals issued by the brain, can be detected by classifying alpha wave and beta wave. So, can be seen how the state of the brain on jazz music listeners.

Electroencephalogram (EEG) is a tool that able to receive brain signals issued because of abnormal activity in brain function. Someone's brain who was listening to jazz music will issue certain signals that will received by the EEG. With the technology of EEG and Wrapper Features Subset Selection method can be seen the brain condition on a jazz music listener. When relax, the brain will produce an alpha wave and beta wave with a certain amplitude. So, the alpha wave and beta wave can be classified and analyzed.

From the research that have been done, Wavelet Packet Decomposition and Wrapper Features Subset Selection give high accuracy because feature that used only feature that has big effect to system. Classifier that used is K-NN has the highest accuracy if value of K equal to 1, because classifier will choose the nearest class to test data. People who listening to jazz have a signal that tends to resemble the signal of a person who is in a relaxed condition despite doing an activity. It can be seen from the test data that classified to relax class although he/she is doing an activity.

Keywords: *Jazz, Electroencephalography, WPD, WFSS, K-NN, Alpha wave, Beta wave.*