

## ***ABSTRACT***

*Today a lot of research on brainwave using Electroencephalography (EEG). EEG is a method to record electrical activity of the human brain, the output of EEG is a graph that contains a lot of information about the activities that occur in the brain. Brain signals recorded in an EEG influenced by the millions of neurons in the brain that is constantly changing based on activities performed or emotions experienced. On the other hand, theres so many research done to study the Qur'an, including the quran relationship with mental health, its comparison with classical music, its influence on the reduction of the stress, and of all these studies showed that listening Quran recitation affect someone psychologist, it can change negative emotion into positive emotion and recommended by psychologist for improving mental health.*

*In this thesis brain activity been analyzed using EEG to peoples when listening to the Qur'an then compare it with the relaxed conditions and unrelaxed conditions using KNN classification. The signal input for classification have been processed by normalization and feature extraction with DWT and FFT.*

*The test result shows that based on alfa signal 97,5% peoples who listening to Qur'an recitation detected as a relax brainwave and test result based on beta signal shows that 100% peoples detected as a relax brainwave.*

***Keyword:*** *Electroencephalography, Brainwave, Quran, KNN, DWT, FFT*