

ABSTRACT

Behavior of honesty has started a little already found at this time due to lack of good akhlaqul karimah. This certainly affects the performance of the brain when someone is honest or lying and will provide its own stimulation to the brain due to fluctuations in ions in brain neurons that can be read by an electroencephalograph (EEG) device. And psychologically also led to the emergence of bad habits in the future. Humans have 5 types of brain signal patterns, namely alpha, beta, theta, delta, and gamma with different frequencies depending on each signal when doing lies and honesty because it has an altered brain signal pattern.

In this study signal extraction uses the Discrete Wavelet Transform (DWT) method because it is a logic function that divides the data into several different frequency components, by interviewing subjects with two questions with different sessions, namely general and sexual sessions, then done analysis for each component using the resolution according to the scale that can be utilized to separate the signals to be analyzed, ie alpha, beta and theta signals.

The results of testing this test data obtained the best accuracy on the PZ channel that is 70%. And the accuracy of each channel obtained varying accuracy but stable between 55% -85%, this is due to the principle of the ANN that is like the human brain, uncertain.

Keywords: Lying, Honest, Alpha, Beta, Theta, EEG, DWT, JST.