

ABSTRACT

According to KBBI, honesty is the nature of what is, open and consistent with what is agreed upon. If someone tells information about the summary to others without change, then the attitude is called honestly. To know someone is telling the truth or talking is done by using an electroencephalogram (EEG) to see changes in activity in the brain. Electroencephalograph or EEG is a brain signal that can be identified using electrodes placed on the head. The human brain itself has several types of signals, namely beta, delta, alpha, theta and gamma.

In this study, discussing beta, theta and gamma waves by conducting interviews with respondents, there are two general sessions and sections of five questions each. The classification process used is Backpropagation Artificial Neural Network.

The results of tests on beta, theta and gamma signals show averages - data averages 68% and channels that have the highest accuracy in the T8 channel with an accuracy of 71% indicated as beta. The accuracy of each channel is obtained from changing differences, this changes from the working principle of ANN which is like an uncertain human brain.

Keywords: *Honesty, EEG, PCA, ANN, Beta, Theta and Gamma.*