Abstract

Emotion is the outpouring of feeling in someone who is affected by the mood and the circumstances surrounding. With the disruption of the delivery of the emotions, it can makes other people understand what is perceived by someone. In fact, because of it also can causes misunderstandings. There are people can't easily convey emotions. For people in distress in conveying emotion, the people would need an intermediary. One way is by reading brain activity signals or commonly called the electroencephalograph (EEG).

In this final project, the emotion classification process comprising the step of preprocessing, training, and testing. Preprocessing performed using Discrete Wavelet Transform. Preliminary data used is 40x32x8064, with 40 records, 32 channels, 8064 datas, and taken from 32 peoples. Thereafter, the method used Deep Neural Network to process the EEG signals to be classified.

Deep Neural Network method produces low performance. Good data can optimize performance system. The best performance was obtained in experiments with learning rate of 0.01 and with a constant parameter epoch of 100, epoch2 at 10, and using sigmoid bipolar activation function with fscore 0.2051.

***Keywords*: *emotion, electroencephalograph, Deep Neural Network, Discrete Wavelet Transform*.**