ABSTRACT

Music is the sound a few tone into a single unit. A tone comes from musical instrument like guitar, piano, flute, etc. Human can feel and know the tone with his feeling, but he can't know the tone that is played exactly. Therefore, writter makes an application for identifying a piano tone.

On this final assignment, system uses piano recorded file on *.wav form. This sound signal is extracted using Harmonic Wavelet Transform algorithm. That signal is represented on time-frequency domain with high resolution. And then, the result of extraction is analyzed its frequency using Backpropagation Neural Netwrok so that, we can decide a tone which is formed on that piano recorded file.

In this observation, it is done to know the accuracy of system. The accuracy of system is accuracy of tone that the system identified with the actual tone. Accuracy level is determined from the number of tones that are expected to emerge. From the results of testing the system generates the system accuracy by 98%. It shows that the use of Harmonic Wavelet Transform algorithms and artificial neural networks Backpropagation in the identification of the piano tone is good.

Keywords : Back propagation, Harmonic Wavelet Transform, tone, wav