

ABSTRACT

The tone is the sound of a uniform. Someone who plays a musical instrument usually relied from the fundamental tone to be played, for example, the basic tone of C = do mean a person who plays a tone based on the tone octave C. But in its development, one can raise or lower the basic tone is commonly called the Transpose. At the end of this task will be designed a system that can record sound and transpose flute players liking or user.

In this thesis designed a system capable of recording sound and transposing flute music that is played according to the mole or sharps are inserted by the player or user. System is designed utilizing Fast Fourier Transform and wavelet so that the output of the system is expected to music that has been raised and lowered or ditranspose.

Systems using FFT method of performance of 90% and Wavelet methods of performance of 92.42% was obtained for the accuracy of the system in transposing the tone. The quality of the framing process is determined by the value parameter and hopsize windowSize. Width and hopsize windowSize representing the transpose of this program is 2048 and 1024 (50% of windowSize). MOS value of an average of 4.05 using FFT and 4.24 using Wavelet which means the quality of the transpose is good, and the system managed to transpose.

Keywords: Transpose, tone, flute, FFT, Wavelet