

ABSTRACT

Chord is a group of tones in diatonic tones and can represent that diatonic tones too. Tone frequency in chord is like the basic frequency tone. Example, tone frequency of A is 440 Hz, so others A tone have frequency in crossing of A like 110 Hz, 220 Hz and etc. This condition has be done in other tones. For deciding a chord base on frequency, STFT (Short Time Fourier Transform) gives one solution with window that will be particular of sound signal into some segmentation.

STFT (Short Time Fourier Transform) is an developing algorithm from FFT (Fast Fourier Transform). STFT algorithm will get sampling from input signal in range t of time. Input signal has in frequency domain. Result of sampling signal will have in time and frequency domain. For sampling signal, STFT uses window function with width of window (T) suitable with result of sampling signal. Window function is located in the first input signal for every different frequency.

In this Final Task has be done research for knowing how competent the window in STFT to deciding tone base on frequency. Accuration levels are decided from how many times of chords that are in suitable part has shown. For giving this accuration level, window is shown in some different width of segmentation. From this simulation, result of system accuration that has been made, reach goal between 60% until 70% level of accuration.

Key word : *window, STFT, tone frequency and chord.*