ABSTRACT

Drumset is a percussion instrument group consisting of skin stretched and beaten with a hand or a rod. Besides skin,also used other materials such as plastic.In pop music, rock music, and jazz music drum usually refer to a drum kit or drumset, is a group musical instrument usually consists of snare, tom-tom, bass drum, cymbal and hi-hat. Person who plays drum usually called drummer.An arrangement sheet music or notations tone harmonic.Basically all the instruments music have a notation or sheet music.Drum sheet music is the composition of notations drum wich can produce sound drum pattern or a certain type of stroke.Drum sheet music in not as complicated as score on other instruments such as guitar,piano, violin, saxophone and ect. Drum sheet music is simpler and easier to learn.

In this thesis sheet music drum detection application is realized to provide innovation in the field of music. This application will detect the drum sheet music on a drum game using Fast Fourier Transform and Euclidean Distance. Methods for measuring the accuracy of the frequency at which a signal is compared with the method Euclidean Distance,so that equality of two signals will be seen from the distance the signal.

Result of this thesis is expected to design a drum sheet music detection application in realtime with the accuracy of 85.71% and 100% to detect the drum sheet music using drums electric an acoustic drums with or without other instruments.

***Keyword:** Fast Fourier Transform (FFT), Euclidean Distance, Drum Sheet Music, Pattern.*