

Pengenalan Nada Terompet Menggunakan Metode Fast Fourier Transform.

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ABSTRACT

Trumpet is a musical instrument that is played by blowing. A composer can recognize the notes they play and the notes they hear. Like a composer, a software can recognize the basic notes or keys and can be displayed on a personal computer (PC). The recognition of these basic tones can be done through the recognition of sound frequencies from musical instruments which are then processed with software. The difference of frequency produced by the trumpet can be processed. Processing at frequency is also known as digital signal processing. There are several algorithms used to perform signal processing at frequencies. One of them is the Fast Fourier Transform (FFT). The evaluation results show that the best combination of Frame Blocking and Window Coefficient variations is 128 and 50 which has an average recognition rate of 93.13% for Frame Blocking = 128 and 72% for Window Coefficient = 50. Then the trumpet tone recognition test using frame blocking variations of 128 and 4 variations of the Coefficient Window 30, 40, 50, 60 in each value of k on K-NN (k=1, k=3, k=5 and k=7) has a percentage tone recognition reaches 100%..

Key Word: *Pengenalan Nada, Marching Band, Fast Fourier Transform*