ABSTRACT

In social life, by the increases of technology on smartphone most of people never forget to capture their moments and share to each other. In case how easy it is to send by internet but the internet quota offered by provider is limited, image compression to reduce the amount of quota is needed. It has encouraged the author to create this thesis.

Method that is used to compress the digital images in this thesis is transformation method. The transformation method that is chosen in this system is Fast Fourier Transform (FFT). The ability of FFT to represent the signal from spatial domain to frequency is used for compression of digital images . Then it applied using Eclipse as programming device to analyze the effects toward the quality of reconstruction images. Program will be running on Android.

FFT Compressor system has been able to do compression process. The success level reached 100% with 23,2% compression ratio and 76.8% space saving. The values of MOS, MSE and PSNR are 3,64; 113,024 and 30,718 dB with average compression time 1034 seconds.

Keywords : Android, Fast Fourier Transform, Compression, Digital Image, Eclipse.