

ABSTRACT

Security is the most important aspect of data exchange. Usually, the data is transmitted shown only for certain parties the data must accepted to entitled user with maintained confidentiality, without known by other people who want to see. Therefore, to keep the data, it needs a data encryption method, which is the science hiding information.

One algorithm reliable enough in securing a real-time data is VEA (Video Encryption Algorithm). VEA can be implemented in the video streaming because the algorithm that can be based stream ciphers and block ciphers.

In this final project has been designed a system to secure data on video surveillance, with VEA and encrypt it using a secret keyword, and then providing secure access to the person who really entitled to it. The purpose of this study was to analyze the performance of the algorithm in terms of time VEA encryption and decryption process with key, and delay it. The software is built using the Java programming language.

The result of this system shows that VEA (*Video Encryption Algorithm*) algorithm modification with particular generated key could encrypt and decrypt video streaming with real-time because the delay lesser than one second.

Keywords : VEA, video streaming, Surveillance, real-time