ABSTRACT

Digital processing is often used for examining audio or visual things or both of them, i.e. digital video. Digital video is commonly used in our daily application; one of them is used for detecting and counting moving object.

In this final project we use digital video processing technology application in order to manage information on video form with moving detection system through calculating vehicle number for defining traffic density. In the moving detection process, we use *frame difference method* and then we calculate the moving object and optimize from threshold value in the sistem.

The result from this system implementation is how system can detect motion for counting vehicle number on the road with minimum error correction in the process. Threshold value optimization in the system is supposed to give optimal performance with minimum error correction.

From the experiment that had been done with *frame difference method* on sample video conclude that accurate level reach 97.6 % and The most optimum threshold value with *frame difference method* from experiment is threshold pixel (30), threshold column (30), and threshold width (30).

Key word: video, moving object, motion detection, *frame difference method*