

## ABSTRACT

Nowadays, the developments of technology is more advanced monitoring systems and develop, and can be used to help humans to discriminate monitoring of a location you want to target. Monitoring is an activity that aims to monitor or observe something. However, many people are monitoring an environment with manual and tools are static or stationary, causing a lot of wasted time just to do the actual monitoring process can be done in a short time and more efficiently with the help of technology.

Based on the above in this thesis makes a supervision tool on a mobile monitoring system which is efficient in order to help make the process of monitoring. The system is a system monitoring application on a mobile device monitoring system integrated with Android-based smartphones. The user can use a mobile system monitoring from a distance is a distance without having to go down to the site directly. User can monitor and supervise the location directly using a mobile application that supported by wireless connections on the system. User can also control the motion of the camera and take a picture of the location through android smartphone so that it can more freely and more efficient to look at the environmental conditions.

Simori system using a wireless network, communications made between user with Simori using communication HTTP request to move the servo and streaming video. By adjusting the servo pulse signal, the user can move the servo to the top, bottom, right, and left. Testing data packets via the TCP protocol testing with as many as 30 times longer observation time for 10 seconds. In order to obtain the highest output data results of average throughput of 0.111 Mbit/sec, retransmission 71 333 times, and the round trip time 3467.5 us. And the lowest of the results of data throughput 0.0453 Mbit/sec, retransmission 2.5 times, and the round trip time of 363.3 us.

**Key words:** Surveillance, mobile monitoring, Android Smartphone