Universiti Teknologi MARA

Mobile Surveillance System For UiTM (Terengganu) Using Motion Detection Mechanism

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Thesis submitted in fulfilment of the requirements for
Bachelor of Science Computer (Hons)
Faculty of Computer and Mathematical Sciences

July 2012

DECLARATION

I certify that this thesis and the research to which it refers are the product from my own work and any ideas from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

July 2012

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ABSTRACT

The surveillance system provides the capability of image streaming and motion detection using high technology camera. In a general surveillance system, video stream are sent to the control center and operator monitor the video stream.

However, there are some problems in this surveillance system. The operator that monitors the video only can be in a fixed location. It can cause an effective result of the surveillance system. By using this manual surveillance system, the operators that monitor the video need to monitor without blinking their eyes in order to make sure all the movements that been captured by the cameras are watched.

To overcome that problem, some solution has been discovered. It is monitor the surveillance video using mobile surveillance system by mobile device and implementation of motion detection mechanism. By using mobile device as front-end of distributed surveillance system, operator can monitor the camera surveillance anytime and everywhere using mobile device. Motion detection mechanism can provide an alert where there are movements that have been captured by the camera in this mobile surveillance system. The server then automatically send alert to the user in order to pay attention that the motion is detected.

This mobile surveillance system using motion detection mechanism (M2SMoDeM) has been tested at the Post B UiTM (Terengganu). The result of this proposed system is evaluated based on the usability and functionality by set of questionnaire. The results have shown that the overall evaluations gave very positive feedback about the M2SMoDeM.

M2SMoDeM had achieved the objectives, but there still some areas that can be studied for future research directions. This project needs to improved version in stream via RTSP connection. Besides, it needs to improved the motion detection mechanism with intelligently in detect and manage the alerting system when the suspicious motion is detected.

In a nutshell, the security of mobile surveillance system is more reliable than manual surveillance system that using more human capability to monitor the video and detect any suspicious movement.

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