Human motion detection framework

Suzaimah Bt Ramli^a; Kamarul Hawari B Ghazali^b; Muhammad Faiz Bin Mohd Ali^b; Zakaria Hifzan B Hisahuddin^a

^aDept. of Computer Science Faculty of Science and Defence Technology Universiti Pertahanan Nasional Malaysia, Kem Sg Besi 57000 Kuala Lumpur, Malaysia ^bFaculty of Electrical and Electronic Engineering, University Malaysia Pahang kamarul@ump.edu.my

ABSTRACT

Ordinary CCTV can only be used to record incidents if it occur. It works without preventing it and it is only useful to be an evidence for the investigation. The purpose of developing this project is as the earlier prevention to avoid crime by giving alert or feedback from the object that was detected from captured video. The captured video in this project will be convert into frame of images and being analyze by using MATLAB software that already consist all the techniques of image processing. The output of this project will be classified if there is any motion or not by using the value of total sum of pixel value from each image data. The classification is actually based on the threshold value. This project indirectly reduce weakness and careless of human guard observation as it give continuous 24-hour monitoring of surveillance video to alert security officers to an intruder potential.

KEYWORDS:

Human motion; Video surveillance

REFERENCES

- 1. Thiel, G. Vision Syst. Ltd., Surbiton, "Automatic CCTV surveillance-towards the Virtual Guard", August 2002.
- 2. Automatic CCTV surveillance-towards the VIRTUAL GUARD, Security Technology, 1999. Proceedings. IEEE 33rd Annual 1999. International Carnahan Conference on 05 Oct 1999-07 Oct 1999
- 3. R. Bowden, A. Gilbert, and K.T.K. Pong, "Tracking Objects Across Uncalibrated Arbitary Topology Camera Networks", Chapter 6, In Intelligent Distributed Video Surveillance Systems, S A Velastin and PRemagnino (Eds), IEE Professional Applications of Computing Series 5, pp157-183, 2005.
- 4. D.M. Gavrila, The visual analysis of human movement: a survey Comput. Vision Image Understanding 73 (1) 82–98. 1999.
- 5. Rafael C. González, Richard Eugene Woods."Digital image processing". Third edition, 2008.