SECURITY SURVEILLANCE SYSTEM USING IP CAMERA

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ABSTRACT

The purpose of the project is to design an IP camera security surveillance system that can be controlled using a graphical user interface (GUI) command. This system can also be controlled through computer networking via TCP/IP protocol. An IP camera is used to record the video and also to capture image. The captured video images then transferred into hard disk which can be used later for checking security issue. All of these processes are programmed using Microsoft Visual Basic 6.

Keywords

Area surveillance system**,** IP Camera**,** Computer Interfacing, Server/client, Microsoft Visual Basic 6

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CHAPTER 1

INTRODUCTION

1.1 Surveillance System

Surveillance system is the process of monitoring the behavior of people, objects or processes within systems for conformity to expected or desired norms in trusted systems for security control. This system becomes one of the important needs nowadays and has been raised to a high level of priority in nation-states around the world especially when advanced technologies such as IP surveillance solutions are made available [1].

This surveillance system is being used in any large number of organizations even in Malaysia such as Hong Leong Assurance Berhad, Malaysia for its Data Center Protection, Telekom Malaysia Berhad (TM) to protect students in their training center day and night and Tan Chong Industrial Equipment Sdn. Bhd (TCIE) to monitor and record the new vehicles stored in the large yard [2].

1.2 Video Surveillance System

Nowadays peoples are still using traditional CCTV system although IP cameras are available. A basic CCTV video surveillance system consists of a collection of video cameras, mounted in fixed positions, or on pan-tilt devices, and has coverage of a circumscribed area defined by the fields of views of the cameras. The video streams are transmitted to a central location, displayed on one or several video monitors and recorded. The person in charge observes the video to determine if there is on going activity that warrants a response [3]. The analog cameras must be connected to the fixed monitoring location by dedicated coaxial cabling, and the tape-based system requires personnel to manage. The coaxial cabling will increase the cost to implement the surveillance system due to the deployment of coaxial cable construction. Since most of the building in Malaysia comes with fiber and network infrastructure and people are familiar with internet technology, IP surveillance system is the best system to be used in Malaysia. Although the available analog cameras still can be used