Video Surveillance System

Project Code: ES4-02

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Nowadays, many security problems exist at home such as burglaries, child abuse and fire accidents. People are very concerned about the situation in their houses. A possible solution is to install a home surveillance system so that users can remote monitor their houses and take immediate action if necessary.

Home surveillance systems available in markets are very expensive. Most people cannot afford them. Moreover, those systems are not user-friendly.

The goal of our Final Year Project is to develop a low cost, user-friendly digital video surveillance system used at home.

Our system is a server-and-client application that is designed for Microsoft Windows platforms. It consists of six main components – Video Capturing, H.263 Encoder, Network Streaming Model, H.263 Decoder, Video Rendering and Graphical User Interface.

The system also includes some advanced functions, such as multi-location remote surveillance, digital video recording, full screen rendering and alarm.
Features:

1. Up to 4 multi-sites monitoring
2. Full screen viewing
3. Web-based image viewing
4. Digital video recording
5. Motion detection
6. Event-trigger recording
7. Alarm
8. More than 25 fps on 352 x 288 resolution
9. Password protection
10. Remote start/stop the surveillance system
11. Support color or black and white video
Result

Video surveillance server interface

Web-based image viewing

User monitoring interface