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Envision, Enable and Empower Smarter and Resilient Societies

STRUCTURED MONITORING SECURITY SYSTEM FOR ACADEME (SMSSA)

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ABSTRACT

As academic institutions grow, it follows that new infrastructures will be built, thus population becomes bigger and security parameters become wider and more complex. Therefore, the demand to complement the existing security is the main concern to help maintain peace and order in academic institutions so as to make it a safe and conducive place for learning and to protect life and property inside its premises.

Lack of pervasive coverage, inflexible deployment options and limited situational awareness are some of challenges that underscores the need for flexible video surveillance solution, which build on the foundation of IP-based video surveillance while also providing the flexibility of a wireless network.

This study designed and simulated a structured monitoring security system with centralized management for the academe using CCTV camera where it enables to save multiple copies of the recorded video in different locations.

It is aimed at providing a better security surveillance service to students, instructors, visitors and staff thus having a secure and safe working and learning environment and minimizing the cost of hiring security personnel to monitor all areas in academic institution.

Figure 1 illustrates the system design of the SMSSA on how the different devices are interfaced to achieve the primary objective of the study to design a structured monitoring security system that will help address problems pertaining to security and safety.The SMSSA includes hardware and software interfaces implementing the following: motion detection, real–time viewing and recording of events in surveillance–concerned areas, and accessing of recorded videos.

With whole advanced information technology, the system is able to detect motion in areas where motion sensing devices were installed. Both GUI and DVR are possible in real-time and multiple viewing of stored videos. Also, automatic panning of surveillance camera around the surveillance-concerned area is activated.
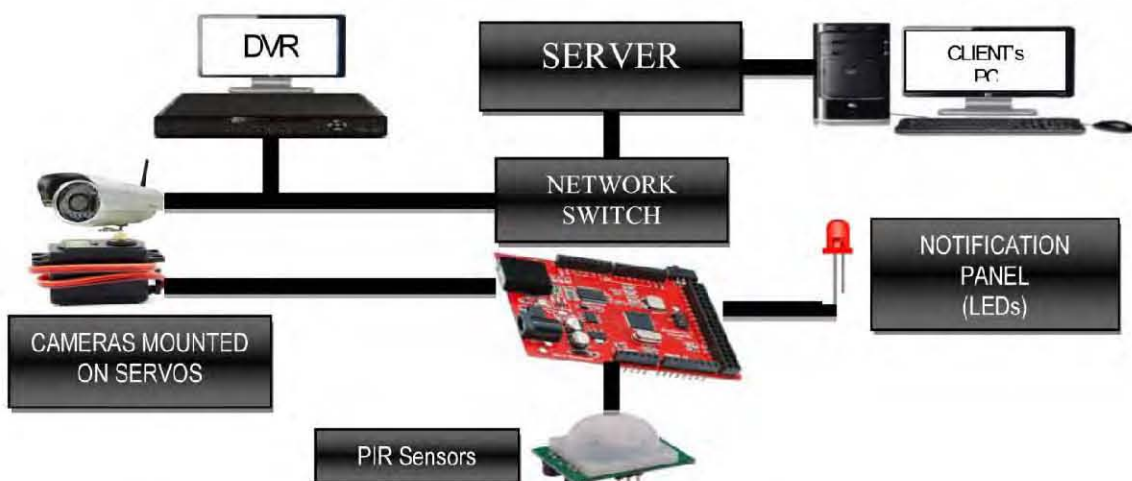
Figure 1. Structured Monitoring Security System for Academe (SMSSA) Design

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