**Abstract**

Over many years, many monitoring videos are installed around public areas and traffic heavy corners, mainly to protect people and prevent them from being attacked. People are not only concerned of their safety in the public areas but also at home to prevent any possible intrusions. To get immediate notification when the house in intruded is the most important issue; it became more important ever since to ensure safety at home to prevent intrusion.

This paper proposes using ZigBee wireless transmission to monitor the possible house intrusion; it uses a PIR/IR sensor to detect intrusion. An individual PIR sensor detects changes in the amount of infrared radiation impinging upon it, which varies depending on the temperature and surface characteristics of the object in front of the sensor. When an object, such as a human, passes in front of the background, such as a wall, the temperature at that point in the sensor’s field of view will rise from room temperature to body temperature, and then back again. The sensor converts the resulting change in incoming IR radiation into a change in output voltage triggering detection. When the network is setup at ZigBee Coordinator and after the ZigBee End-Device joins the network. In this paper, it discusses and performs lab experiment of detecting value from the sensor network and from the variation values to determine is there any intrusion. In closed and no one existence indoor area it has a steady value while it changes when someone intrudes into the area. An intrusion detection system is developed by using the variation in values. After the system is validated we further develop an in house intrusion monitor system that when someone intrudes into the house the system will alarm or send a message to the house owner’s cell phone to alarm the house has been intruded so as to attain the in house security protection effect and also alert any Fire Accident occurred by reading current temperature.