**IOT BASED THEFT PREMPTION AND SECURITY SYSTEM**

ABSTRACT:

Internet of things has been governing the electronics era with cloud services dominating the ever increasing electronics product segment. Security and safety has always become a basic necessity for urban population. The paper proposes a novel security system based on Open source cloud server “things speak .com” and a low cost esp8266 Wi-Fi module. The project includes a PIR module which constantly monitoring the Home or Work space to be monitored .When the PIR module detects a intruder it sends a signal to the PIC microcontroller and the controller is connected to a Esp8266 wifi module and also to a alarm system. The System transmits an alert signal to the Open source cloud which provides a alert signal on the users mobile phone. The system employs a second esp8266 module which is programmed to act as a web server, which allows the user to activate or deactivate the security system by means of any device with internet. The system also employs a thumb print reader rs305 which controls the opening and the closing of a safety locker door. Thus the system uses esp8266 Wi-Fi module and PIC to control the security system from the users mobile phone by means of any device with a potential internet connection.