MAKER: Security Gadget for Tirumala Pilgrims

Dr. Hugh Jack P.E., Western Carolina University

Dr. Jack is not the author. This abstract has been submitted on behalf of A. M. Sasidhar Reddy, B. Sukumar, C.C. Nikhil - Sri Venkateshwara College of Engineering, Tirupati, India
Security Gadget for Tirumala Pilgrims

A. M. Sasidhar Reddy, B. Sukumar, C.C. Nikhil

Sri Venkateshwara College of Engineering, Tirupati, India

Abstract

Now-a-days need for security makes many people look for the different ways in order to protect them. Security is primary concern everywhere and for everyone. This project describes the designing of an electronic gadget for the security of Tirumala pilgrims using Arduino microcontroller. This is a simple and useful security system. Gadget is tied up with a set of smart sensors like PIR sensor and Pulse rate sensor. A PIR sensor is interfaced to the controller to detect the presence of an animal in the forest area and immediately the gadget will send a message to the security team by using GSM technology and also a buzzer alert is given to security team and other people about the presence of an animal. A Pulse rate sensor is also present in the gadget to find the increase in pulse rate and inform the family members with a message to their mobile. This is helpful to monitor the health of the pilgrim rate sensor. The proposed system is shown to be a simple, cost effective and flexible that makes it a suitable for pilgrims in providing security.

This project presents is implemented using microcontroller Arduino. To create functionality in the system, the software program is made which is in embedded C language. This software is loaded into the Arduino microcontroller.