

Prototype of Automatic Window Security System Based on IoT (Internet of Things) by Using PIR (Passive Infrared Receiver) Sensor

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Abstract

With the development of a very rapid era at this time, much can be solved with IoT (Internet of Things) technology. Utilization of IoT (Internet of Things) can help humans in solving problems from a small scale to a large scale. Examples of problems in small matters are the problem of compiling apartments or buildings that have no security such as installing trellis. The impact of these problems can endanger a person's life if they fall from an apartment window. Things that can make someone fall by leaning near the window and children who are playing with the window. By overcoming the problem, the IoT (Internet of Things) application was made using a NodeMCU microcontroller in which the window is automatically closed compilation of people who open the window too close. This system is made for the safety of people who forget to close windows when playing or doing other activities. The system is designed using a PIR sensor (Passive Infrared Receiver) and uses an Arduiono IDE. From the design made, the system can automate the automatic window using a PIR sensor (Passive Infrared Receiver).

Keywords: Internet of Things, Passive Infrared Receiver, NodeMCU ESP8266 Microcontroller, camera module, and Raspberrypi.