**Raspberry Pi based Interactive Home Automation System through E-mail**

**ABSTRACT**

 Home automation is becoming more and more popular day by day due to its numerous advantages. This can be achieved by local networking or by remote control. This paper aims at designing a basic home automation application on Raspberry Pi through reading the subject of E-mail and the algorithm for the same has been developed in python environment which is the default programming environment provided by Raspberry Pi. Results show the efficient implementation of proposed algorithm for home automation.

**Existing System:**

In the existing system, the system implemented was only controlling the appliances over Email, but it lacks the status feedback of the device whether the action requested is carried out or not.

**Proposed System:**

The proposed, will control the devices connected to an ARM 11 based Raspberry pi board, through the commands from Email, and also send a feedback email of the status of the device. A human motion detection also be included using A PIR sensor, through which will receive an email alert of unauthorized motion detection.

**BLOCK DIAGRAM**

**Hardware:**

ARM 11(Raspberry Pi Board,), Light, Fan, PIR Sensor

**Software:**

Raspbian OS, Python language.

**Applications:**

Home automation, Industrial Surveillance

**Advantages:**

* Operation from Remote location.
* Compatible.
* Easy to install and Use.