**HOME AUTOMATION SYSTEM USING RASPBERRY PI**

**SEMINAR / PROJECT REPORT**

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***BONAFIDE CERTIFICATE***

***This is to certify that the seminar report entitled***

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***is a bonafide account of the work done by him/her under our supervision***

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***Head of department Project coordinator Project guide***

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At this moment of accomplishment, we are presenting our work with

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and self –belief.

**ABSTRACT**

*Home automation is one of the most researched topics in the present technological scenario. Home automation is basically an application of* ***Internet of Things*** *or* ***IoT****. Internet of things is an interconnection of all the appliances and devices that we use in our everyday life, it may be coffee vending machines, smart phones, medical monitors to huge weather stations. In the approach of internet of things, all devices work in a synchronised manner, i.e. all the devices work depending on other devices in one way or the other.*

*The system consists of a main processing unit, a microcontroller to interface the different modules, and the independent modules.*

*The main control system is implemented using a Raspberry Pi micro-computer.*

*In our project the area which we are going to concentrate is home automation that works based on* ***real time data****. It does the following functions:*

* *Adaptive internal lighting*
* *Temperature controlled air-conditioning*
* *Automatic external lighting*
* *Automatic water pumping system*
* *Password enabled door lock using keypad*
* *Smart Music player*
* *Logging of all the control events*

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**Chapter 1**

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