

Newsletter 2020 Issue II



**Bharati Vidyapeeth's
Institute of Management and Information Technology
Navi Mumbai**

**BHARATI VIDYAPEETH'S
INSTITUTE OF MANAGEMENT AND INFORMATION TECHNOLOGY
NAVI MUMBAI**



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BVIMIT fortifies student's intellectual awaking and social transformation in different spheres that makes them to contribute to the organization and world as well. We strengthen student's hard work and commitments towards knowledge.

BVIMIT provides MCA, VI semester course enables overall development of students and give a different perspective towards corporate life.

Current newsletter entitled "**PRABHAT-exploring tech rising star**" is a combined effort of students and staff members that commences articles on emerging technologies with theme as "**HOME AUTOMATION**" provides articles for the same.

I hope "**PRABHAT**" will take you to the world of prominent technologies.

Editorial Desk



Dr. Pratibha Deshmukh
Editor-in-chief

It is indeed a great honor to be the Newsletter Editor for me and also an immense pleasure to launch the first edition of BVIMIT Newsletter “PRABHAT- exploring tech rising star”.

As we are living in the technological era, we have selected the topic for the article as “**HOME AUTOMATION**” to make students aware about this emerging technology. It aims to be a truly interdisciplinary platform seeking to bring together a range of diverse voices on the topic in order to stimulate discussion.

A huge thank you to all the students who contributed writing the articles, without which there wouldn't have been this newsletter.

I appreciate PRABHAT student members for their everlasting support throughout the creation of this edition.

I hope “**PRABHAT**” will convey some technical knowledge to you.



NEELAM R JAISWAR

STUDENT MCA

IOT HOME AUTOMATION

In this article, we will discuss the overview of IoT home automation. And will focus on smart lighting, smart appliances, intrusion detection, smoke/gas detector, etc. Let's discuss it one by one.

Overview

Home automation is constructing automation for a domestic, mentioned as a sensible home or smart house. In the IoT home automation ecosystem, you can control your devices like light, fan, TV, etc.

A domestic automation system can monitor and/or manage home attributes adore lighting, climate, enjoyment systems, and appliances. It is very helpful to control your home devices.

It's going to in addition incorporates domestic security such as access management and alarm systems. Once it coupled with the internet, domestic gadgets are a very important constituent of the Internet of Things.

A domestic automation system usually connects controlled devices to a central hub or gateway.

The program for control of the system makes use of both wall-mounted terminals, tablet or desktop computers, a smartphone application, or an online interface that may even be approachable off-sitethrough the Internet.

Smart Home Components

Here, you will see the smart home components like smart lighting, smart appliances, intrusion detection, smoke/gas detector, etc. So, let's discuss it.

Component-1:

Smart Lighting

Smart lighting for home helps in saving energy by adapting the life to the ambient condition and switching on/off or dimming the light when needed. Smart lighting solutions for homes achieve energy saving by sensing the human movements and their environments and controlling the lights accordingly.

Component-2:

Smart Appliances -

Smart appliances with the management are here and also provide status information to the users remotely. Smart washer/dryer can be controlled remotely and notify when the washing and drying are complete.

Smart refrigerators can keep track of the item store and send updates to the users when an item is low on stock.

Component-3:

Intrusion Detection -

Home intrusion detection systems use security cameras and sensors to detect intrusion and raise alerts. Alerts can be informed via an SMS, or an email sent to the user.

Advanced systems can even send detailed alerts such as an image shoot or short video clips.

Component-4:

Smoke/gas detectors -

Smoke detectors are installed in homes and buildings to detect smoke that is typically an early sign of Fire. It uses optical detection, ionization for Air sampling techniques to detect smoke. Gas detectors can detect the presence of harmful gases such as CO, LPG, etc.

It can raise alerts in the human voice describing where the problem is.

