Survey on IOT based Home Automation

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Abstract

IOT is now a days most preferred technology. A system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. One of the major sides of IOT is a smart home. Smart home is very helpful for the peoples to make life easy. Home Automation is the automatic or semi-automatic control and monitoring of household appliances and residential house features like doors, Gate and even the windows. The IOT definition has been evolved due to convergence of multiple technologies like, The Real Time Analysis, Machine Learning, Commodities Sensors and Embedded systems. The IOT technology is most synonyms with products pretending to the concept of “Smart Home” in the consumer market. Home Automation is important because it is time saving as the lights and fan can be easily turned on and off without wasting much time by reaching to the switch and turn on the light. The doors can also be opened without opening manually the user can opened by sitting on chair. The water level
indicator is used for water indicator from the water tank. In that, whenever the water gets low there will be sensor which will start the water motor automatically and when the water tank gets full, again the water motor will get off automatically. For the fire safety, the fire sensor will be present at home which will detect the fire or the smoke and alert the house members. The control system will be under the users mobile phone where there will be application.

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**Index Terms**

Computer Science  
Information Systems
Keywords

Home automation, Arduino UNO, sensors, Bluetooth module, WIFI module, Speech recognition, smart phone, Android application.