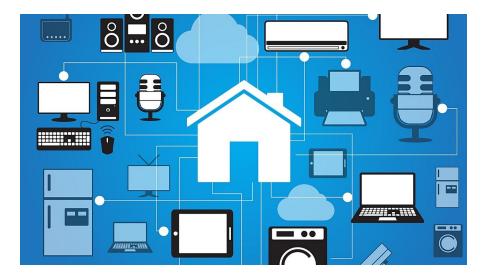# Home Automation System

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ABSTRACT

Home automation is on horizon. It is an emerging technology and also a need of today. From the last decade, a number of standards have been defined for home appliances. The main objectives of home automation are controlling, management and coordination of home appliances in a comfortable, effective and secure way. On the other hand, Artificial Intelligence is evolving as a technology for developing automatic systems that can perceive the environment , learn from environment, and can make decision using case based reasoning. Using **computer vision**, **NLP**, **deep learning**, **decision making** and **reasoning,** the AI provides a better solution for almost all automatic systems. In the proposed system, it is assumed that the home system adapts itself to the occupants lifestyle. The proposed **Intelligent System** continuously **learns and adapts to the users' preferences.** By using **Natural Language Processing** and **Speech Recognition,** the Intelligent System will execute the commands issued by the user. One definition of an automated and networked home is, "An automated and networked home is one in which every appliance can be remotely managed from anywhere on the Internet with a simple Web browser and AI tools such as computer vision, speech and object recognition". The general goal of the automatic-home movement is to use AI technology to integrate the devices, appliances and services found in homes so that the entire domestic living space can be controlled by human language speeches.