

ESP1819

## **Arduino IoT Home Automation System for IR Devices**

The common in use for remote control tasks achieved via specific mobile (e.g. Android or iOS) and this control done only by radio remote control systems, infrared (IR) devices, etc. and limited in the edges of office/house, but not remote control automated for electric/ electronic devices from anywhere (outside of office/house). This paper proposed an Internet of Things (IoT ) home automated system in two categories, the hardware via a device named Worldwide Auto-mobile and software has been designed to automate a favourite used devices such as TV, SAT, DVD addition to any other devices that can be controlled by an IR signal, locally and anywhere (wide world) via a hybrid mobile application will reduce the number of used controllers in the house by using a single mobile software that control devices using Internet via a Wi-Fi module ESP8266 based on Arduino UNO. This system is being connected to a cloud server and to the mobile application can support iOS/Android mobile or iPad/Tablet. The implementation of the proposed system of home automated was achieved in minimum cost (about 30\$) for office/house devices and with a delay in the range (0.4 -1) s. this range near real-time (within a few seconds), i.e. it provides a good solution which can be reached in anywhere and anytime based on the cloud.