



Hand Gesture based Home Control Device using IoT

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Abstract: Internet of Things or IoT is nothing but an evolved version of Internet, which includes sensors, consumer electronic devices and other embedded systems connected to it besides computers, smart phones and tablets to collect and exchange data with one another. IoT technology can also be applied to create a new concept for smart homes to provide intelligence, comfort to improve the quality of life. Home automation is control appliances using the remote control, internet, voice and gesture. We control the appliances using the hand gesture. A Human Computer Interaction (HCI) between computers and human understands human language and develop a user friendly interface. Gestures a non-verbal form of communication provides the HCI interface. The goal of gesture recognition is to create a system which can identify specific human gestures and use them to convey information or for device control. Hand gesture recognition is relatively complicated since different persons have different speeds and styles to perform gestures. Hand gesture recognition is suffering from the accuracy of hand detection. Many algorithms are proposed for gesture recognition accuracy. I proposed one approach; they also increase the accuracy of hand gesture detection. In proposed approach OpenCV library is used for solve the problem of accuracy. I proposed one approach; they also increase the accuracy of hand gesture detection. In proposed approach OpenCV library is used for solve the problem of accuracy. In that approach background subtraction is used for better recognition of the hand from the frame and increases the accuracy rate of hand recognition.

Keywords: Home Automation, Internet of Things (IoT), Gesture Recognition, Human computer interface (HCI), Hand Detection,
