Acknowledgement

Abstract

Advancement in technology in the last years has made life more comfortable and efficient. The need to monitor a person from a particular location or any remote location is necessary because it saves lot of time and comfort our life. A variety of digital smart home services have recently been provided as technology develops securing a resident's convenience. The most important part of any home security system is accurately identifying visitors who enter and leave through the door. Therefore, this paper proposed an IoT based automated visitor monitoring system using the most emerging applications of modern era, 'the GSM technology'. Viola-Jones algorithm is used to detect human faces by capturing the faces using camera and matched with the face dataset using Fisher's linear discriminant (FLD) face recognition algorithm. If the system recognizes that face it gives an instant notification for the arrival of family members to the system holder via GSM modem. If it fails to recognize the incoming people, then it will also send the notification as outsider's arrival. Thus, the system owner can easily monitor the time of family members staying away from home and also get information about unknown visitors.