|  |  |  |  |
| --- | --- | --- | --- |
| **Title:** | Advanced Wireless Control & Feedback Based Multi-Functional Automatic Security System | | |
| **Author(s) Name:** | Md. Ashiquzzaman | | |
| **Contact Email(s):** | ashiquzzaman.eee@aiub.edu | | |
| **Published Journal Name:** | IEEE REGION 10 SYMPOSIUM (TENSYMP) 2020 | | |
| **Type of Publication:** | Conference | | |
| **Volume:** |  | Issue |  |
| **Publisher:** | IEEE Xplore | | |
| **Publication Date:** | 5-7 June 2020 | | |
| **ISSN:** | 2642-6102 | | |
| **DOI:** | 10.1109/TENSYMP50017.2020.9230623 | | |
| **URL:** | <https://ieeexplore.ieee.org/document/9230623> | | |
| **Other Related Info.:** | pp- 1046 - 1049 | | |
|  | | | |

|  |  |
| --- | --- |
| **Abstract:** |  |
| In this research work, an advanced automatic multifunctional compact security system technology is developed using wireless networking system. The security  system provides smart security and also alerts the user to avoid the critical circumstances in the daily security issues is held. This system provides a smart solution to the variety of different problems via remote control by the software name Cayenne. This software provides the user to control the system using smart mobile or computer from all over the world and needs to be connected via internet. The system provides general security for essential purposes as the Motion detecting system alerts for any kind of movement inside the area where it is installed, the gas detecting system alerts the user for any type of gas leakage  inside the room and also clearing the leaking gas by exhaust fan automatically, the fire detection system detects instantly when a slight fire is emerged also warning the user with alarm, the LDR system is for electrical door lock and it can be controlled by Cayenne using mobile or computer and lastly a home light  system which can be turned on/off by the user of Cayenne. Raspberry Pi has been used to connect and control all the necessary equipment. The system provides the most essential security for home and also for corporate world and it is very simple, easy to operate, and consumes small space. | |