Review of: "Visualization of Home Security Sensor System Based on IoT Server"

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Potential competing interests: No potential competing interests to declare.

Comments to the Author

General Overview:

This manuscript mainly focused on the need of detecting threats of fire and theft for homeowners in Indonesia. A Home Security Sensor System was designed to alert the homeowner to the fire risk and intruders in the house. It is a human solicitude topic and the system proposed is of clear logic with the good will of reducing such losses.

Major Comments

Some defects should be paid attention to in the aspects of both English writing and experiment settings.

(1) Punctuation marks should be carefully used. Mistakes include the adjacent appearance of comma and period (e.g. it is located in the IC. or a microcontroller chip consisting of a CPU,. memory, and I/O which we can control through programming.), the redundant use of period (e.g. Microcontroller can be said as a computer. in one chip.). Such mistakes are not individual cases in this article.

(2) Expression should be much better formulated. Some sentences are really hard to understand due to their length as well as the misuse of punctuation marks (The security system that the author wants to develop at this time is a security system based on the Internet of Things (IoT) that provides information quickly to homeowners by sending information on the condition of the home environment to a device in order to prevent and anticipate losses that can be caused by a less stringent home security system. such as theft or fire.)

(3) Literatures should be included in the section of literature review. Instead of talking about the related works, the literature review section in this article seems more likely to be a list of hardware that would be used. For example, Section 2.6. and 2.7.has not cited literatures. Apart from the hardware used by this system, a more comprehensive literature study should be done in the field of IoT or system security:

E.g. DOI: 10.1109/JIOT.2020.2969326 and DOI: 10.1109/CIoT53061.2022.9766814 etc.

(4) Figures should have a minimum explanation, tables as well.

(5) In the section 3.1. Problem identification, only fire risk is referred to while the system detects both fire risk and human

movement.

(6) The system should be more finely designed and the experiments should be conducted in a more thorough way. For example, the experiments need to find out the minimum number of smoke sensors needed to cover the whole house, but not just test if the system works by burning the paper and directing the smoke from the paper to the MQ-2 sensor. Besides, the system needs to distinguish the movement of the acquaintances from stranger. System security problem should be considered as well, as intruders might paralyze the sensors. Some related works provide valuable opinions on system security:

E.g. DOI: 10.1109/TII.2019.2938778 and DOI: 10.1109/InCIT56086.2022.10067278 etc.