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.

The paper presents a practical IoT-based home security system addressing theft, fire, and gas leaks. However, it lacks technical depth, detailed analysis, and critical assessment of its performance and limitations. Addressing these gaps would significantly enhance the paper's contribution to IoT-based security solutions.

Furthermore, the paper would benefit from the inclusion of more updated references to strengthen its relevance and reliability. Integrating recent studies and findings related to the topic will demonstrate the author's awareness of current developments in the field and ensure that the paper remains up-to-date.

https://www.researchgate.net/publication/331049288_Internet_of_things_utilization_for_ehealthcare_monitoring

These enhancements will contribute to the overall quality and impact of the paper, enhancing its value to the academic community and readers interested in the subject matter.

System Design

The system integrates an ESP8266 microcontroller, an MQ-2 gas sensor, and a PIR sensor, with data visualization through thinger.io and an LCD display.

Strengths:

- Clear identification of the system components and their respective roles in detecting gas leaks, fire, and human presence.
- Inclusion of both online (thinger.io) and offline (LCD) visualization methods enhances system usability.

Suggestions for Improvement

1. Clearly define the unique contributions of the research.
2. Include more specific details about the system's design, methodology, and results.
3. Highlight any challenges or limitations encountered.
4. Incorporate statistics or studies to contextualize the problem.
5. Discuss existing home security systems and their limitations to justify the need for this research.

6. Critically assess the system's limitations and propose future work.
7. Compare the system with existing solutions to highlight its advantages.
8. Discuss practical considerations, such as cost, scalability, and ease of deployment.