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| Book Name: | [**New Horizons of Science, Technology and Culture**](https://bookstore.bookpi.org/product/new-horizons-of-science-technology-and-culture-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_6069** |
| Title of the Manuscript: | **IOT-ENABLED SMART LIGHTING CONTROL SYSTEM WITH MOTION DETECTION USING PASSIVE INFRARED SENSOR TECHNOLOGY** |
| Type of the Article | **Book Chapter** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript addresses an essential challenge in energy management by proposing a smart lighting control system using IoT and PIR sensor technology. The approach not only contributes to reducing unnecessary energy consumption but also enhances user comfort, especially in smart home environments. Its real-time response, integration of multiple input methods, and experimental validation make it a valuable addition to ongoing efforts in sustainable and intelligent automation systems. The findings support the development of scalable, cost-effective home automation solutions with significant practical impact. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | Yes, the title is suitable and accurately reflects the core of the research.  Optional Suggestion: For more clarity and conciseness:  Suggested title: "IoT-Based Smart Lighting Control System Using PIR Sensor for Motion Detection" |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | The abstract is comprehensive and well-written. It covers the problem, proposed solution, method, benefits, and broader implications.  Suggestions for improvement:  Avoid repetition (e.g., “enhances user comfort” is mentioned multiple times).  You may briefly mention the key evaluation results (e.g., detection range, response time) to strengthen the impact. |  |
| **Is the manuscript scientifically, correct? Please write here.** | Yes, the manuscript is scientifically correct. The methodology, component descriptions, block diagrams, system implementation, and performance evaluation are clearly presented. It includes mathematical modeling for sensor calibration and experimental validation, which strengthens the scientific rigor. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | The references are mostly sufficient and fairly recent (2020–2024).  Suggestions:  A few more highly cited references from IEEE/IET/Springer on PIR-based lighting systems or IoT-enabled smart automation (post-2020) could improve the strength.  Consider adding more citations on “BLE performance in smart homes” or “Capacitive sensor accuracy in embedded systems.” |  |
| Is the language/English quality of the article suitable for scholarly communications? | The English is generally suitable for scholarly communication, though there are some grammatical issues and awkward constructions (e.g., “has be adopted” → “have been adopted”). A thorough proofreading or language polishing is recommended to improve clarity and flow. |  |
| Optional/General comments | The figures and system diagrams are relevant but should be uniformly numbered and captioned.  The introduction should be streamlined by reducing redundancy.  Ensure consistent formatting, particularly in mathematical expressions and references. |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

**Reviewer details:**

**Konduri Ramesh, Bapatla Engineering College, India**