

**Review Form 3**

Journal Name:	<a href="#">Asian Journal of Research in Computer Science</a>
Manuscript Number:	Ms_AJRCOS_126636
Title of the Manuscript:	<b>OPTIMIZING ENERGY EFFICIENCY IN SMART HOME AUTOMATION THROUGH REINFORCEMENT LEARNING AND IOT</b>
Type of the Article	Research Article

**Review Form 3**

**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	Reviewer's comment	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<ol style="list-style-type: none"> <li>1. Authors usually present original findings, experiments, or studies, and given the focus on applying reinforcement learning and IoT for energy optimization and it is almost certainly a research article intended for scientific community.</li> <li>2. Author addresses environmental sustainability and energy savings, which are core aims to optimize energy efficiency using cutting-edge AI and IoT technologies are very clear</li> <li>3. Authors clearly focused and discussed IoT devices and smart sensors for real-time monitoring and adaptability, which is very much useful for intelligent energy management like energy efficiency in smart home environments, is commendable research in current day energy consumption as it is required.</li> <li>4. Contributions are effectively reflects the objectives and outcomes described in this manuscript is very clear and supports the article's theme of using RL and IoT for sustainable energy optimization in smart homes.</li> </ol>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes, Title is very well highlights key research elements</p>	
<p>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.</p>	<p>Yes, abstract gives a clear, high-level overview of the research objectives, methods, findings, and implications, making it comprehensive and informative for prospective readers.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Reorganize is required, summarization and contributions are missing in each subsections. Figures not cited well like Figure Nos.1,2,3,4,5..16 and not explained any figure in the manuscript body. Secondly, hardly find main methodology flow diagram without finding any difficulty. Figures are copied from the existing sources .Authors must cite the source of figures. In the Result and discussion section, discussion presented is unclear. Table formats are not uniform. Tables are not cited well. In addition, subsections like 4.2 to 4.4 are unclear which may be presented discussion section. Citing references Like 21-27 in a future work section is not appropriate and this section is irreverent as this text 92% generated by AI which is not related to this manuscript IN future suggestions.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>Yes, this manuscript appears scientifically robust and technically sound but authors should reconsider and focus and clearly justify the following issues for more clarity to the readers in scientific community.</p> <ol style="list-style-type: none"> <li>1. The proposed framework is not clear in methodology and realistic approach as this study offers a well-defined architecture that integrates IoT devices with reinforcement learning (RL) to optimize energy consumption in smart homes.</li> <li>2. Justification is required as the use of Q-learning, a common and effective RL algorithm for smart automation tasks, is well suited to the objective of dynamic energy management.</li> <li>3. The authors not clearly acknowledges limitations in existing rule-based and static automation systems and highlights how RL can dynamically adapt to user behavior and environmental changes.</li> <li>4. The research gap analysis does not provide a solid foundation for the study's contributions and potential impact in the area of smart home energy optimization.</li> </ol>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Yes, adequate and references are recent as well.</p>	

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Minor REVISION comments <b>Is the language/English quality of the article suitable for scholarly communications?</b>	Language quality is appropriate for a scientific manuscript	
Optional/General comments	, Not clearly given its relevance, innovative approach, and thorough methodology. Addressing the identified areas for improvement, particularly in terms of clarity, discussion, result, and conclusion remarks as required.	

### **PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

### Reviewer Details:

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