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| Book Name: | **Intelligent IoT Systems: From Research to Real-World Solutions** |
| Manuscript Number: | **Ms\_BPR\_6282.5** |
| Title of the Manuscript: | **IoT Based Power Consumption Monitoring For Home Appliances** |
| 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 is important for the scientific community as it:   1. Demonstrates practical IoT-enabled solutions for energy monitoring and management. 2. Integrates forecasting models (LSTM, XGBoost) that highlight the role of AI/ML in smart energy. 3. Contributes to sustainable practices by supporting renewable integration. 4. Provides a foundation for future research on scalability, security, and industrial adoption. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | Yes, the title is suitable. However, it could be made more specific: Suggested alternative: “IoT-Based Power Consumption Monitoring and Forecasting for Smart Homes” |  |
| 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 clear and informative. However, it would be stronger if it included:   * A brief mention of the dataset used. * Quantitative performance results of the ML models (accuracy, error metrics). |  |
| **Is the manuscript scientifically, correct? Please write here.** | The work is scientifically sound but requires additional details on:   * Sensor and hardware specifications. * Dataset description and preprocessing steps. * Performance metrics of forecasting models. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | Most references are relevant and recent (2020–2023). However, the manuscript can benefit from additional references on:   * Edge computing in IoT-based energy systems. * Advanced anomaly detection in smart grids (IEEE Access, Applied Energy, 2022–2024). |  |
| Is the language/English quality of the article suitable for scholarly communications? | Yes, the manuscript is written in clear English. Minor grammatical improvements and polishing could make it more scholarly. |  |
| Optional/General comments | Figures are clear, but results would be stronger with tables/graphs showing:   * Forecasting model comparisons (e.g., LSTM vs. XGBoost). * Energy consumption trends before/after system deployment. |  |

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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?** |  |  |

**Reviewer details:**

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