

**Manuscript : #181221-112241-Fuzzy logic inference based automated water irrigation system**

**“Response to the Reviewers comments”**

**Review: 1**

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The manuscript has scholarly importance and it seems very interesting. But the title of this manuscript seems not good. Try to improve your manuscript abstract, introduction, add more citations, you can search some paper and methods to link with modeling approaches which are the main vision and scope of the MESE journal. Where is the original model? The manuscript does not indicate any original model. Please link the model with your manuscript results and discussion sections. Many other places where discussion is confusing. No clear connection is made between conclusions and the evidence of the results and methods. Please separate the methods, results and discussion section etc.

**Response:**

Thank you for your comment. We have changed the title of the manuscript to give a better idea to the subject [**Page no 1**]. Moreover we also have rewritten the abstract in the revised version as per the comment received. We also have added a few more latest references. We have also revised the introduction section by removing some redundant texts and rephrasing some sentences to give a clear idea on the subject.

We have proposed a new model which is not based on any previously available model. We looked into the literature and came to know about various methods for water irrigation system that are mostly based on sensor based infrastructure. We already have mentioned some of such existing systems in the related work section. We have come up with a novel idea to implement a system for automatic water irrigation using the concepts of image classification and deep learning. **A new diagram(figure 3)[page 8] is prepared that comprehensively showcases the parts of our system and how they are connected.** We proposed our model in figure 4 and we have presented its prototype implementation in figure 7. Our results and discussions are linked in the revised manuscript with this prototype model.

We have rewritten the conclusion in the revised manuscript. Also we have mentioned separate sections for methods, results and discussion. [**Section 4: Methods, Page No: 7, Section 5: Results, Page No:18, Section 6: Discussion, Page No:20**]. All these sections are updated and thoroughly reviewed.

**Comment:** The paper is poorly written. Please improve the paper writing to look the MESE paper style. Abstract is very poorly written. The text of this paper in general needs a thorough review, as there are multiple spelling and grammatical errors.

**Response:** Thank you for your suggestion. We have done a thorough review of the entire paper and some unnoted spelling and grammatical errors are removed. Apart from this, the redundant information is trimmed out and the whole text is rephrased according to the MESE journal style. The abstract on the other hand is completely rewritten in the revised manuscript.

**Comment:** Method is inadequately described; not at all clear where information comes from. Results are not presented clearly or comprehensively. Layout and text presentations especially results, discussion and conclusion are not well written. Please put the numeric number for all the equations.

**Response:** Thank you very much. We updated methods, results, discussion and conclusion sections in the revised manuscript. Figure 3 is included that represents the flow of information. Also all the equations used in the manuscript are given numeric number.

**Comment:** Please reduce the self-citations. We will highly discourage to use the self-citation in the manuscript. Citation and References does not show the proper way in the text of this manuscript. Please put the citation in the texts of your manuscript according to MESE journal styles otherwise the paper will not be consider for further processes. Please add some latest citations and references in your manuscript but strictly avoid your self-citations. Texts where you change must be indicated by a different color.

**Response:** We have removed the self-citations from the paper and added some more latest citations and references in our manuscript. The citation style is revised according to the MESE journal styles.