

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_131157
Title of the Manuscript:	DEVELOPMENT OF IOT-BASED WATER QUALITY CONTROL SYSTEM AND FUZZY-BASED AUTOMATIC FISH FEEDING SYSTEM
Type of the Article	1. Original Research Article

PART 1: Comments

	Reviewer’s comment Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.	Author’s Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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 paper gives good direction on how IoT and fuzzy logic can be employed to improve fish farming operations. It identifies pivotal issues in managing water quality and optimizing fish feeding, both being crucial to maintaining fish health and farm output. The innovative approach and step-by-step methodology can be a helpful guide to researchers and practitioners of smart aquaculture systems.	This study discusses how IoT and fuzzy logic can be used to improve intelligent and modern fish farming, which discusses important issues in managing water quality and optimizing automatic and modern fish feeding, both of which are important results for maintaining fish health and fish farming results. The implications of this study are that it can be used in developing further research related to intelligent and modern fish farming systems.
Is the title of the article suitable? (If not please suggest an alternative title)	The provided title is clear and descriptive with the research focus well conveyed. In the interest of readability and brevity, an alternate title can be suggested: "Development of an IoT-Based Water Quality Control and Fuzzy Logic Automatic Fish Feeding System". This alternative is more concise in retaining.	The research title was changed to "Development of Fuzzy Logic Automatic Fish Feeding System and IoT-based Water Quality Control".

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<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>The abstract is wordy and confusing. Here are the changes required:</p> <p>1. Remove Redundancies: Delete repeat statements.</p> <p>2. Clarify Objectives: Make the purpose of the research clear.</p> <p>3. Highlight Key Findings: Elaborate key findings and implications</p>	<p>Abstract revision: Rapidly developing technological advances make it easier for fish farmers to manage fish farming systems in an intelligent, structured, and modern way. This study discusses how IoT and fuzzy logic can be used to improve fish farming in an intelligent and modern way, which includes discussing important issues in managing water quality and optimizing fish feeding. The purpose of this study is to develop an IoT-based water quality control system and an automatic fish feeder based on a fuzzy logic controller. The method used in this study is the research and development (R n D) method. The input parameters in this study are temperature, pH, and water clarity, while the outputs in this study are: aerator working duration, heater working duration, cooler working duration, motor working duration, and the amount of fish feed. The results of the study showed an average error percentage of <5% so that the sensor can work accurately in determining water quality and determining the amount of feed; 2) the water quality control system can work well, where the heater, cooler, and aerator can work according to the quality of the pond; 3) the automatic fish feeding system has an average percentage of <5% so that it can work well and precisely in determining the duration of the motor and the amount of fish feed..</p>
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The paper seems scientifically robust based on content provided. It has a clear methodology, uses suitable sensors and control units, and presents data supporting its conclusions. Without critically examining all experimental details, data analysis, and references exhaustively, however, it is not possible to authoritatively attest to its scientific value. One needs to thoroughly examine the complete paper to check if there are any hidden errors or misinterpretations.</p>	<p>This paper is a research paper whose data collection was guided by the fisheries extension worker of the food security and fisheries service of Nganjuk district. The results of the study are shown in table 2 and table 3.</p>
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The references are adequate and recent but could be further supported by a few newer articles on IoT applications in aquaculture, fuzzy logic controllers, and water quality management. Include:</p> <p>1. "IoT-based smart aquaculture: A comprehensive review" (Journal of Network and Computer Applications, 2022).</p> <p>2. "Recent advancements in fuzzy logic applications for environmental monitoring" (Environmental Monitoring and Assessment, 2021).</p>	<p>the references are adequate and up to date within the last 5 years</p>

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Is the language/English quality of the article suitable for scholarly communications?	Language quality in the article is not entirely academic. The article has complex sentences, minor grammatical mistakes, and awkward sentences that need to be rectified.	Thank you, we are trying to fix it.
Optional/General comments	<div>1. The manuscript needs extensive proofreading and editing to enhance clarity, conciseness, and overall readability.</div> <div>2. The manuscript has poor clarity and conciseness. Simplify the complex sentences and eliminate redundant data. Correct grammatical mistakes and awkward sentences; extensive proofreading and editing are necessary.</div> <div>3. Figures 4 and 5 cannot be read and require improvement. Ensure all figures and tables are properly labeled and cited. Some images seem to be copied from Google; ensure all images are original or properly credited.</div> <div>4. Include more recent studies on IoT in aquaculture, fuzzy logic controllers, and water quality management in the references.</div> <div>5. Some statements are not well cited.</div> <div>6. The abstract should be concise and focused, clearly specifying the research aims, methodology, and key findings. Ensure the methodology is properly explained and justified.</div> <div>7. Explain the findings well in the results and discussion section and relate them to the existing literature.</div> <div>8. The block diagram is simple and not innovative; consider improving it.</div> <div>9. Explain how the network delivers messages to Telegram.</div> <div>10. The manuscript fails to explain the requirement of an active network connection to receive messages on Telegram. It needs to be clarified that in the absence of data pack or network, the user will not receive notifications. This limitation should be properly indicated to ensure readers are aware of the system demands and limitations.</div> <div>The manuscript needs significant revisions. Significant enhancement in clarity, conciseness, and language quality is required. Some of the statements are not adequately referenced. The dependency on an active internet connection for the transmission of Telegram messages must be explicitly mentioned. Figures 4 and 5 are not well defined and must be enhanced, and some of the images appear to have been copied without giving due credit. The block diagram is not detailed and must be supplemented to indicate the complexity of the system. These issues must be resolved before the manuscript can be accepted again.</div> <div>1.</div> <div>kembali.</div>	<div>1. The manuscript needs to be thoroughly reviewed and edited to improve overall clarity, conciseness, and readability.</div> <div>2. The manuscript and conclusion have been revised</div> <div>3. Figures 4 and 5 have been revised; all original figures are based on the author's research on the gurami village of Singkalanyar, Prambon District, Nganjuk Regency, Indonesia</div> <div>4. References have been updated</div> <div>5. Correction of citation statements has been made</div> <div>6. The abstract has been revised to be concise and focused, clearly stating the research objectives, methodology, and main findings.</div> <div>7. Explanation of the findings can be found in the research results and discussion section</div> <div>8. The diagram is not corrected</div> <div>9. How the network sends to Telegram has been explained in the discussion of the research methodology</div> <div>10. The manuscript has been revised by explaining the requirements for an active network connection to receive messages on Telegram in the research results and discussion section</div>

PART 2:

	Reviewer's comment	Author's comment (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)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	No