

### Review Form 3

Journal Name:	<a href="#">Journal of Engineering Research and Reports</a>
Manuscript Number:	Ms_JERR_125895
Title of the Manuscript:	Design and application of fuzzy PID controller based on MATLAB
Type of the Article	Original Research Article

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### PART 1: Review Comments

<b>Compulsory</b> REVISION comments	Reviewer's comment	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>
<p><b>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.</b></p>	<p>This manuscript makes a valuable contribution to the scientific community by demonstrating the potential of fuzzy PID control for enhancing intelligent vehicle speed regulation.</p> <p>This research holds promise for advancing the development of more sophisticated and reliable control systems for autonomous vehicles, ultimately contributing to enhanced safety, efficiency, and driver assistance in future transportation systems.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>The title "Design and application of fuzzy PID controller based on MATLAB" accurately reflects the content of the paper.</p>	
<p><b>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.</b></p>	<p>The abstract provides a decent overview of the paper's content, but it could be improved in a few areas:</p> <ul style="list-style-type: none"> <li>- The abstract could be more specific about the challenges and limitations of traditional PID controllers in intelligent vehicle control. For example, it could mention issues like non-linearity, time-varying dynamics, and environmental disturbances.</li> <li>- The abstract could provide quantitative results to support the claims of improved performance. For example, it could mention the percentage reduction in overshoot or the improvement in settling time achieved using the fuzzy PID controller.</li> <li>- The abstract could be more tailored to a specific audience. While it mentions the relevance to the automotive industry, it doesn't clearly state the target audience (e.g., researchers, engineers, practitioners).</li> </ul>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>The structure of the paper seems reasonable, but it could be improved by adding specific subsections within each section to enhance clarity and organization. Separating the results and discussion into distinct sections would also strengthen the paper's presentation.</p>	
<p><b>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.</b></p>	<p>After considering the suggested corrections this manuscript demonstrates scientific correctness through its clear methodology, systematic approach to design and evaluation, and consistent alignment between results and adopted methods. The paper leverages well-established concepts in PID control and fuzzy logic, applying them to the relevant domain of intelligent vehicle speed regulation. The use of MATLAB/Simulink for simulation provides a robust platform for testing and comparing the fuzzy PID</p>	

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	controller against traditional PID implementations. The manuscript's strength lies in its thorough analysis of the fuzzy PID controller's performance and its clear presentation of the findings, making it scientifically robust and technically sound.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b> :	In order to improve the reference citation add the Doi number for the references as it is enclosed. For example: [2] Ningsih, Wahyuni, Profiyanti Hermin Suharti, and Mohammad Ghani. "Performance analysis of IMC-PID controller on PCT-14 air pressure control system." MethodsX (2024): 102966. <a href="https://doi.org/10.1016/j.mex.2024.102966">https://doi.org/10.1016/j.mex.2024.102966</a>	
<u>Minor</u> REVISION comments  <b>Is the language/English quality of the article suitable for scholarly communications?</b>	Based on the provided text, the English quality of the article needs improvement to be suitable for scholarly communications. While the content demonstrates a good understanding of the topic, there are several grammatical errors, awkward phrasing, and stylistic inconsistencies that detract from the professionalism and clarity of the writing.	
<u>Optional/General</u> comments		

**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:**

Name:	<b>Muhanad D. Hashim Almawlawe</b>
Department, University & Country	<b>AL-Qadisiyah University, College of Engineering, Iraq</b>

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