

Review Form 3

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_120451
Title of the Manuscript:	A Comprehensive Exploration of Hidden Markov Models and Their Diverse Applications
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	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)
<p>Please write few sentences regarding the importance this manuscript for scientific community. Why do you like (or dislike) this manuscript? Minimum 3-4 sentences may be required for this part.</p>		
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>In the manuscript entitled, a comprehensive exploration of hidden markov models and their diverse applications, the authors describe clearly HMM as statistical models that are used in different fields to get hidden information from observable sequential events. HMMs are of great importance and it is interesting that researchers focus more on this to stimulate applications. The paper is well written and easy to follow but cannot be accepted in this current and form and needs further corrections. A minor revision is required on the followings:</p> <ol style="list-style-type: none"> 1. The authors can find three of more articles in different fields (1. bioinformatics, 2. disease progression modeling, and 3. statistical inference) where they think the HMM models are well applied and described for illustration purpose. 2. They should focus on the relevant aspects of HMMs that can be easily applied to different systems and provide easy and clear examples for illustrations for reproducibility. 3. The authors should take care of the size police and space between lines. The conclusion for instance has single line space. 4. References are needed in the text 5. I will suggest that the authors add few comments on the advantages and disadvantages or limitation of different algorithm =EM, Bacum well, Viterbi and provide few examples of applications for illustrations 6. They can also add few sentences on the application of Hidden Markov Models on systems with dependant random variables accompanied with examples from few articles for illustrations. 7. HMMs are widely employed in maintenance engineering mainly as method that help to find optimum <i>maintenance</i> policy of component in Operational Safety to determine the future behaviour of the process by its present state. It will be great if the authors can include this as maintenance preventive strategy and provide examples on given systems. 8. The conclusion should be rewritten and anchored on the findings of the study. 	

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Is the abstract of the article comprehensive? Do you suggest addition (or deletion) of some points in this section? Please write your suggestions here.		
Are subsections and structure of the manuscript appropriate?		
Please write few sentences regarding the scientific correctness of this manuscript. Why do think that this manuscript is scientifically robust and technically sound? Minimum 3-4 sentences may be required for this part.		
Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.		
Minor REVISION comments		
Is language/English quality of the article suitable for scholarly communications?		
Optional/General comments		

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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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