

Review Form 1.7

Journal Name:	Asian Journal of Research in Computer Science
Manuscript Number:	Ms_AJRCOS_99986
Title of the Manuscript:	Development of a COVID-19 Patients' Fatality Prediction System Using Swarm Intelligent Convolution Neural Network
Type of the Article	Original Research 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:

(<https://www.journalajrcos.com/index.php/AJRCOS/editorial-policy>)

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PART 1: Review Comments

	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)
<p>Compulsory REVISION comments</p> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>1. Results: Recommend to be Major revisions</p> <p>This paper develops system that can be used to accurately and timely predict fatality of a positively tested COVID-19 patient through the use of deep learning technique – swarm intelligent convolutional neural network. An Enhanced Firefly Algorithm (EFA) was formulated by applying roulette wheel selection procedure to model the movement process of the firefly as a deterministic process in order to assist the standard Firefly Algorithm (FA) and application of Chaotic Sinusoidal Map Function to model the attractive process of the firefly which establishes balance between exploration and exploitation in FA. The results show that EFA-CNN model performs better in prediction of COVID-19 patients' fatality compared to the CNN model. It was also discovered that the formulated EFA applied to select optimal values of the hyper-parameters for the CNN architecture accounted for improved recognition accuracy and reduced recognition time of the developed COVID-19 Patients' Fatality Prediction System. The system developed will assist both the government and healthcare workers in providing the needed computational capability for the prediction of fatality level of a positively tested COVID-19 patient.</p> <p>This paper is with some merits for <i>Asian Journal of Research in Computer Science</i>. However, it requires some major revisions.</p> <p>Firstly, the abstract should be refined to clearly indicate what authors had done within 120 words.</p> <p>Secondly, for Section 1, authors should provide the comments of the cited papers after introducing each relevant work. What readers require is, by convinced literature review, to understand the clear thinking/consideration why the proposed approach can reach more convinced results. This is the very contribution from authors. In addition, authors also should provide more sufficient critical literature review to indicate the drawbacks of existed approaches, then, well define the main stream of research direction, how did those previous studies perform? Employ which methodologies? Which problem still requires to be solved? Why is the proposed approach suitable to be used to solve the critical problem? We need more convinced literature reviews to indicate clearly the state-of-the-art development. And very importantly, authors always have to write a paragraph saying: "The rest of the paper is organized as follows. Section 2 contains the literature review. Section 3 contains the methodology (method). Section 4 contains the results. Section 5 contains the conclusions and policy implications". So, the reader knows what's coming next.</p> <p>For Section 2, authors should also introduce their proposed research framework more effective, i.e., some essential brief explanation vis-à-vis the text with a total research flowchart or framework diagram for each proposed algorithm to indicate how these employed models are working to receive the experimental results. It is difficult to understand how the proposed approaches are working.</p> <p>For Section 3, authors should also provide a section, namely conclusions, to conclude this paper. In addition, authors should use more alternative models as the benchmarking models, authors should also conduct some statistical test to ensure the superiority of the proposed approach, i.e., how could authors ensure that their results are superior to others? Meanwhile, authors also have to provide some insight discussion of the results. Authors can refer the following references for conducting statistical test.</p> <p>Short term load forecasting based on empirical wavelet transform and random forest. <i>Electrical Engineering</i>, 104(6), pp. 4433-4449, 2022.</p>	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> 1. Is language/English quality of the article suitable for scholarly communications? 		
<p>Optional/General comments</p>		

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PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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