

### Review Form 3

Journal Name:	<a href="#">Asian Journal of Research in Computer Science</a>
Manuscript Number:	Ms_AJRCOS_129746
Title of the Manuscript:	Lung Disease Classification and Detection based on Convolutional Neural Network: A review
Type of the Article	

#### **General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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#### **Important Policies Regarding Peer Review**

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#### **PART 1: 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>
<b>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.</b>	This manuscript is a significant contribution to the scientific community as it reviews the application of deep learning, specifically convolutional neural networks (CNNs), in lung disease detection and classification. It provides a detailed comparison of various CNN architectures and techniques such as transfer learning and data augmentation, which are crucial for addressing challenges in medical imaging, including limited dataset availability and high diagnostic accuracy demands. By consolidating and analyzing recent advancements, the paper aids researchers in selecting appropriate models for computer-aided diagnosis (CAD) systems, ultimately improving early detection and treatment of critical diseases like pneumonia and COVID-19.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	Yes, the title is suitable and accurately reflects the content of the manuscript.	
<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>	The abstract provides a good overview of the objectives, methods, and key aspects of the manuscript. However, it can be improved by explicitly mentioning: <ul style="list-style-type: none"> <li>- The specific challenges in existing CAD systems.</li> <li>- The unique contribution of this review compared to other existing studies.</li> </ul> Suggested Revision: Add a brief mention of the limitations of traditional methods and how the discussed CNN approaches address these issues.	
<b>Is the manuscript scientifically, correct? Please write here.</b>	The manuscript is scientifically robust and technically sound. It effectively explains the role of CNN architectures, transfer learning, and data augmentation in lung disease classification. However, the paper could benefit from: <ul style="list-style-type: none"> <li>- Including a critical discussion of the limitations of the reviewed methods.</li> <li>- Highlighting specific areas for future research to address current shortcomings.</li> </ul>	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	The references are adequate and relevant, with most being recent. However, additional references from 2022–2024 should be included to ensure the manuscript reflects the latest advancements in the field. Suggested topics for additional references:	

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	<ul style="list-style-type: none"> <li>- Lightweight CNN models for resource-constrained environments.</li> <li>- Hybrid approaches combining CNNs with other deep learning techniques for improved medical imaging analysis.</li> </ul>	
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	<p>The language quality is generally clear, but there are instances of grammatical errors and repetitive phrases. Suggested improvements:</p> <ul style="list-style-type: none"> <li>- Correct sentences like, "A Deep Learning method has been used to diagnose whether or not a chest X-ray image has Pneumonia or not," to avoid redundancy.</li> <li>- Ensure consistent use of technical terms such as "CNN" and "X-ray."</li> </ul>	
<b><u>Optional/General</u> comments</b>		

**PART 2:**

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

**Reviewer Details:**

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