

# Review of: "Application of Ensemble Learning in CXR Classification for Improving COVID-19 Diagnosis"

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**Potential competing interests:** No potential competing interests to declare.

**Title:** Application of Ensemble Learning in CXR Classification for Enhancing COVID-19 Diagnosis

## Comments

It has been almost 2 years since the end of the COVID-19 pandemic. Several studies have developed thousands of CAD-based models. Therefore, this study needs to elaborate on the significance of the study, especially during the post-pandemic period. Is there a problem with previously developed models? What value do they provide?

Authors can add a table to summarize the related work according to reference, model, classes, number of image datasets, and results.

Here are other articles that can be added:

- <https://doi.org/10.1007/s12559-020-09787-5>
- <https://doi.org/10.3390/s21238045>
- <https://doi.org/10.1111/exsy.12705>

<https://doi.org/10.1007/s00264-020-04609-7>

Authors can discuss the limitations of previous work at the end of the related work section.

Authors can add a figure or flow chart after the first paragraph of the proposed methodology.

There is a need to elaborate on the pre-processing steps, partitioning/splits, and summarize them using a table for each split (60:40; 70:30...).

In the future work, authors should mention cross-validation.

A confusion matrix is missing in the result section.

There is a need for a realistic comparison with previous work in the discussion section.

Authors can also mention the challenges of deploying CAD-based models.

Authors can also mention IoT-based frameworks. These articles can be cited:

- <https://doi.org/10.3390/s23010426>
- <https://doi.org/10.1155/2022/1987917>
- <https://doi.org/10.1016/j.future.2021.05.019>