Review of: "An Improved Hybrid Transfer Learning-Based Deep Learning Model for Alzheimer's Disease Detection Using CT and MRI Scans"

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Potential competing interests: No potential competing interests to declare.

Dear author,

Your article makes a significant contribution to the understanding of deep learning methods in Alzheimer's disease detection using CT scans and MRI. However, I would like to provide you with some suggestions and questions to further enhance the quality of your work:

1-Inversion of Figure Titles: There appears to be confusion between the titles of figures 4 and 5. Could you please verify and correct this if necessary?

2- Question on Data Imbalance: You mention data imbalance in your dataset, but also state that each class contains 680 images. Could you clarify where exactly this data imbalance lies?

3- Use of Data Augmentation: Your study utilizes data augmentation, while some recent research suggests that it may not be necessary in the context of transfer learning. Have you explored the performance of your models without the use of data augmentation?

4-Presentation of Densenet121 Model Results: It would be beneficial to include a detailed table of results obtained with the Densenet121 model, similar to what you have done for the Resnet50 and VGG16 models. This would allow for a more direct and in-depth comparison between the different architectures.

5-Proposal for Model Modification: Have you considered developing a custom architecture based on the best-performing model, by modifying certain layers or the classification layers? This approach could provide an interesting point of comparison with existing models and potentially improve performance.