

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.

This paper performs a mini review of current deep learning-based methods for detecting early signs of Alzheimer's disease, and then compares the performance of several models.

The paper may contain information useful to practitioners in this field. However, the presentation and scope of the paper could benefit from further improvement:

1. For Table 1, more explanation is needed. For example, for the third method, the dataset shows MNIST, which is often used but appears to be for handwritten digits rather than medical images. Also, for the second method, the dataset shows retinal photographs, which do not appear to be MRI images typically used for AD diagnosis.
2. Currently, the paper only performs experiments on the ADNI dataset. Testing the methods on an independent dataset appears necessary to demonstrate generalizability of the performance.

Overall, the paper would be strengthened by providing more context around the datasets used in prior work, and evaluating the proposed methods on additional datasets beyond ADNI. I would like to score it 3.6/5.

I hope these suggestions are helpful for the authors to improve the paper.