

# 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.

- **The text lines must be aligned with the same width.**
- "This paper focuses on classifying AD patients into various stages (early mental retardation, mild mental impairment, late mild mental impairment, and final Alzheimer's stage) by utilizing transfer learning with ResNet50, VGG16, and DenseNet121 along with CNN networks on a large dataset. The work classifies Alzheimer's patients into various stages using transfer learning with ResNet50, VGG16, and DenseNet121 along with CNN on a large dataset." **The type of NN model mentioned twice in the "abstract" section so it seems to be repeated and then the abstract be long and need to prephrasing to be more precise.**
- **Key words must be in alhpabitical order.**
- "Identification of the image dataset, and the identified dataset is in ANN format." **There is no format to image called ANN format. Must be change this sentence to be " the image will be suitable to training by ANN".**
- "Application of various data augmentation techniques on the normalized dataset." **In the healthy section we must be avoid the augmentation in the data so in this days there is generation data.**
- **In figure 2 there is no declare about ensembling part in the model and the result is 4 class while in the while in introduction the author mentioned there is 5 classes** "The proposed method can learn the most useful features instead of training a specific CNN network from scratch. To categorize AD into five classes, the proposed research study has used four pre-trained networks, including VGG 16, ResNet, and DenseNet121."
- **Figure 5 title is related to the accuracy and losses while the content is other things so must be revised.**
- **The figure 6 show the losses for the suggested model will be increased after 100 epoches which mean there is over fitting so if the author use early stop point he must mentioned that.**
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