

Introduction

Original plan

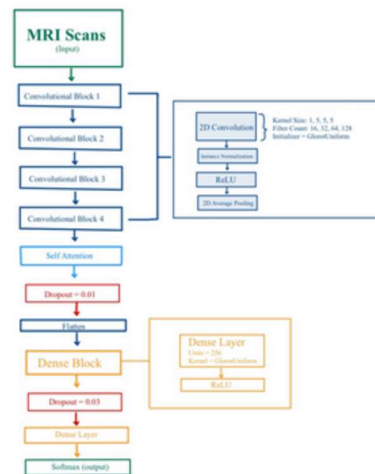
Reduce kernel size in first convolutional layer
Introduce instance normalization
Implement attention layer
Independent unbalanced dataset

Roadblocks

Obtaining access to ADNI dataset
Format of the MRIs in ADNI
Implementing attention layer using parent paper's pre-existing syntax structure

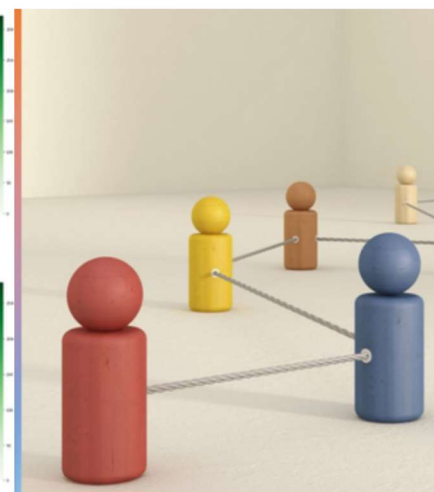
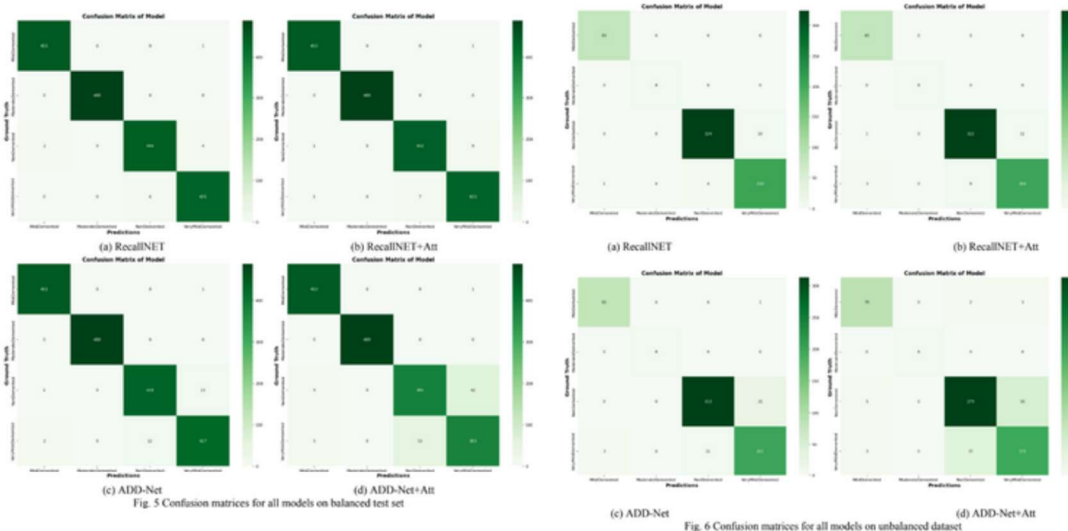
New plan

Split the Kaggle dataset to use as an independent dataset
Modify the syntax to implement the attention layer



RecallNET Novelty

- Small kernel size within the first convolutional layer
- Instance normalization within the convolutional blocks
- Attention layer after the convolutional blocks
- Introduction of an independent, unbalanced dataset
- Ablation study to observe the impact of the attention layer



Findings

- RecallNET represents the state-of-the-art model for AD classification focused on early detection
 - Performed better than baseline models on both unbalanced and balanced test data sets
- Ablation study on the addition of an attention layer
 - Found that it decreased evaluation metrics across both models