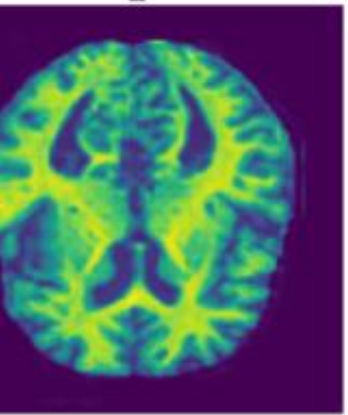
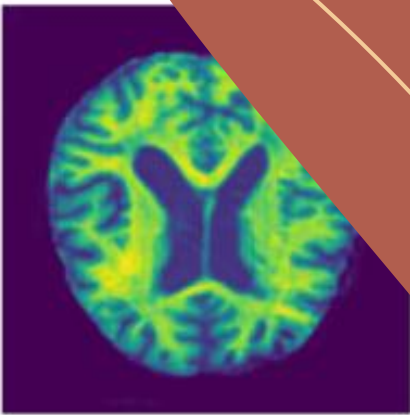


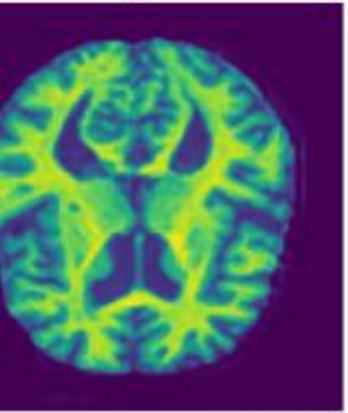
moderate\_alzheimer



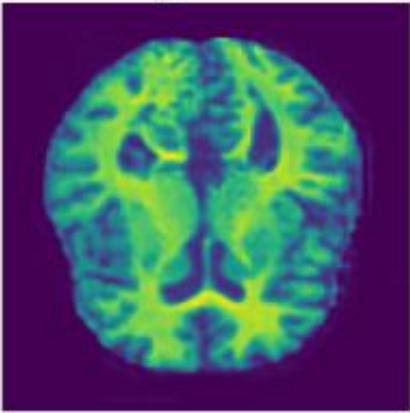
moderate



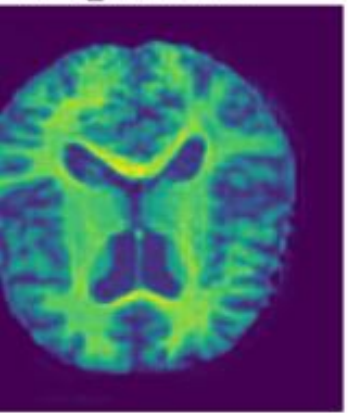
moderate\_alzheimer



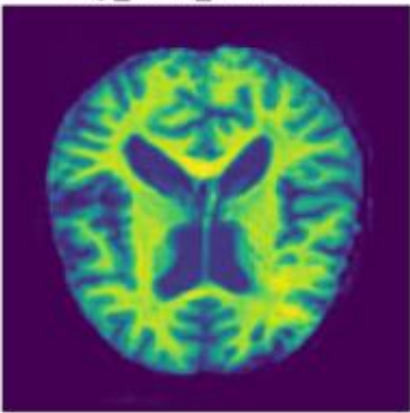
mild\_alzheimer



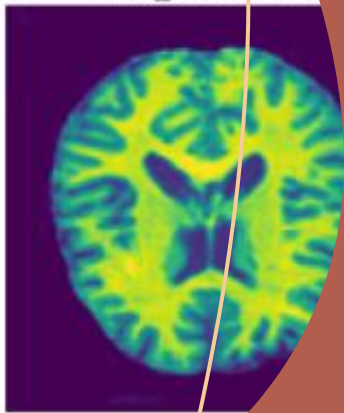
mild\_alzheimer



very\_mild\_alzheimer



non\_alzheimer



PANIC team - SHD2020

# alzheimers- mri-analysis

Simon  
Louis  
Nicolas



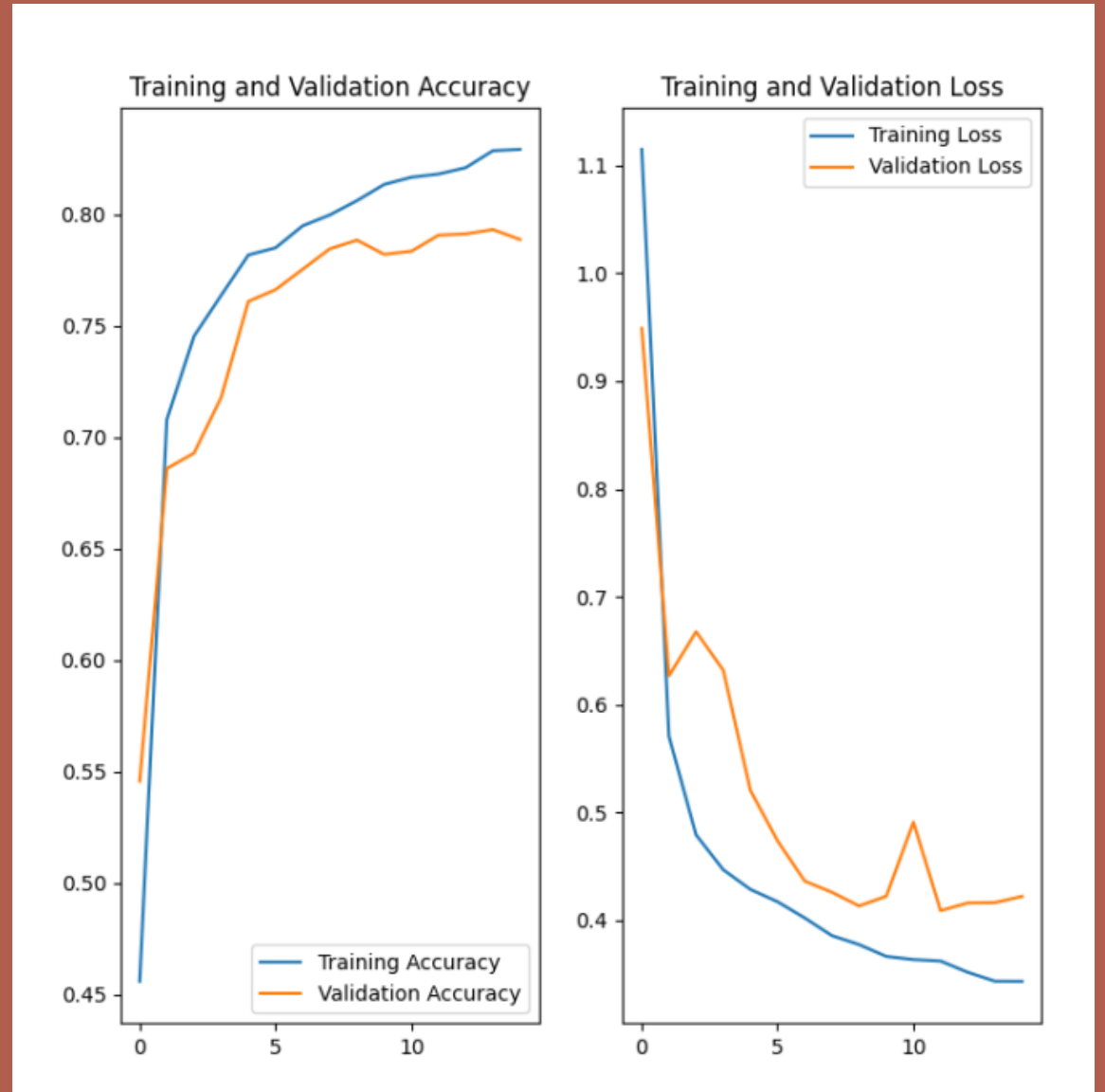
# Model (3 layers)

Test accuracy	Train: synthetic data Test: : real data	Train: real data Test: synthetic data
Binary classification (Alzheimer or not)	59%	80%
4 classes (not Alzheimer, very mild, mild, moderate)	50%	40%

# Model (3 layers)

Test accuracy	Train: synthetic data Test: : real data	Train: real data Test: synthetic data
Binary classification (Alzheimer or not)	59%	80%
4 classes (not Alzheimer, very mild, mild, moderate)	50%	40%

Focus on the model  
train on synthetic  
data, for 4 classes  
(50% of accuracy on real data)



Accuracy and loss (depending of iteration of model)  
for **training** and **validation**

# Perspectives

- Change neural network structure (layers number and nodes)
- Remove redundancy in images dataset
- Other methods available for image classification ?
- Improve the classification model with data-augmentation ?





**This project was our first real introduction to  
image classification from synthetic data**

Thank you !