CT Scan Image Classification in this problem statement I approached the problem by using the model named ResNet-50

Approach:

1) The dataset is secondary dataset which you will get on kaggle: https://www.kaggle.com/datasets/plameneduardo/sarscov2-ctscan-dataset
2) Resize the image
3) Did Data Augmentation also used early stopping and checkpoint
4) Train the model on ResNet-50
5) But while I was using early stopping I got to know that model was getting over fitted. So I used ReduceLROnPlateau which will reduce the learning rate if the metric is not improving or getting overfitted and the accuracy was good
6) Used the confusion matrix and also plot the line plot for the accuracy and loss of the model. Also did the prediction of the image weather it was non covid or covid and got the accurate predictions

Conclusion and Future Scope:

As per the dataset the accuracy was 85% and loss is getting decreased in every epoch. So more the training would give good accuracy. Also did used the model for the prediction which was good enough to give accurate decisions. Also the model was not over fitted or under fitted.
The future scope would be to use real world data (primary data) also compare the model with the various other model xception and vgg19. Also to choose between them which model is good or which model is giving the good accuracy