RBE549: Computer Vision – Lab 9

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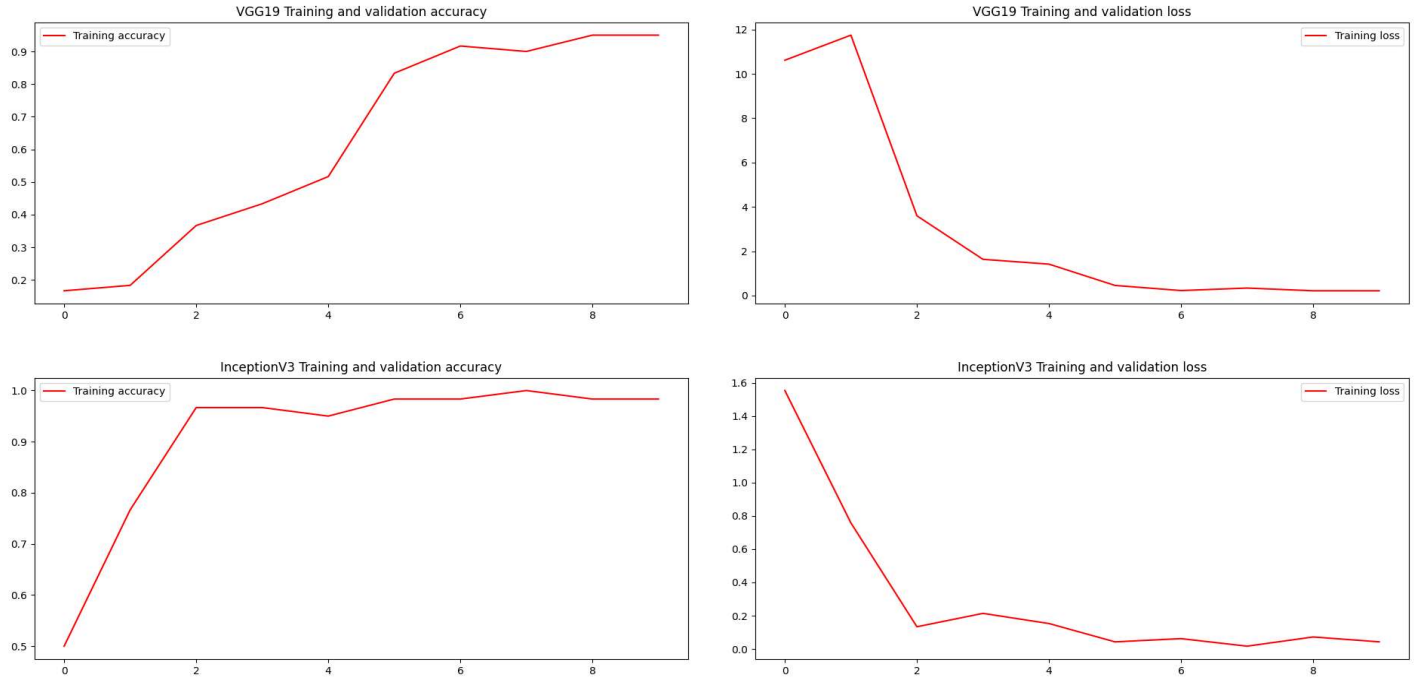
Part A – 2

Training Loss and Validation Accuracy Plot Comparison b/w VGG-19/Inception-V3



Predictions on random image:

- Prediction input

```
# Test the models with random images
test_image_paths = ['Test/Cap.jpeg', 'Test/RubicCube.png', 'Test/Torch.jpeg', 'Test/ScrewDriver.jpeg']
```

- Prediction results of both models (Both models are being confused in Screw-Driver and Torch)

```
Keys in InceptionV3 history.history: dict_keys(['loss', 'accuracy'])
1/1 [==============================] - 0s 165ms/step
1/1 [==============================] - 1s 640ms/step
VGG19 predicted class for Test/Cap.jpeg: MathWorksCap
InceptionV3 predicted class for Test/Cap.jpeg: MathWorksCap
1/1 [==============================] - 0s 70ms/step
1/1 [==============================] - 0s 34ms/step
VGG19 predicted class for Test/RubicCube.png: MathWorks Cube
InceptionV3 predicted class for Test/RubicCube.png: MathWorks Cube
1/1 [==============================] - 0s 67ms/step
1/1 [==============================] - 0s 31ms/step
VGG19 predicted class for Test/Torch.jpeg: MathWorks Screwdriver
InceptionV3 predicted class for Test/Torch.jpeg: MathWorks Torch
1/1 [==============================] - 0s 67ms/step
1/1 [==============================] - 0s 32ms/step
VGG19 predicted class for Test/ScrewDriver.jpeg: MathWorks Screwdriver
InceptionV3 predicted class for Test/ScrewDriver.jpeg: MathWorks Torch
```