Assignment Set 12

Fateme Rahimi

29 December 2020

In this exercise, I used "Resnet" pre-trained models. For the "Linnaeus" data set, the result was as follows:

Resnet50	Resnet101
Epoch 1/3	Epoch 1/3
train loss: 0.3179, acc: 0.9013	train loss: 0.2564, acc: 0.9220
test loss: 0.1096, acc: 0.9675	test loss: 0.1111, acc: 0.9635
Epoch 2/3	Epoch 2/3
train loss: 0.1282, acc: 0.9555	train loss: 0.1218, acc: 0.9603
test loss: 0.1044, acc: 0.9665	test loss: 0.0768, acc: 0.9730
Epoch 3/3	Epoch 3/3
train loss: 0.1099, acc: 0.9623	train loss: 0.1094, acc: 0.9652
test loss: 0.0955, acc: 0.9685	test loss: 0.0748, acc: 0.9710

As can be seen in the table, the loss in each epoch has decreased and the accuracy has increased. it can also be seen that the accuracy of the resnet101 is slightly better than the resent50 model by comparing the values in the table.

My experience in using these models is that they had a lot of execution time, but acceptable accuracy was achieved, which also worked well on the test set and did not over fitted.