

ASSIGNMENT 2 KPT PACE DEEP LEARNING -1919689

For this assignment, the task given were to improve the model which was used to classify fruit based on the dataset that we already have.

The first improvement that was assigned was to improve the model training by going through the model centered strategies. To improve the model training by using this method, what we can do is to change the pretrained models, optimizer, loss function, batch size and the learning rate. In this case, what we change is the learning rate from 0.00001 to 0.001. By doing so we can see a significant improvement on the model accuracy as it jumps from 83% to 95%.

The second modification that I done to the models is by going through the dataset in the google drive and filter the dataset. Some of the data were removed as it were deemed as a bad picture or unrelated picture. Some data were also added into the dataset to improve the test model specifically in the durian class. By doing so, our accuracy jumps from 95% to 98%.

Below were the inferred image from the webcam that detected the watermelon and pumpkin.



Model file link:

<https://drive.google.com/file/d/14l3KV6NPaOQdedQUYilvM4-i9pTP-1DA/view?usp=sharing>