Hi all, I'm Qiyao Zhou, and this time I will give a presentation on the results of our group project.

First, for test1 and 2 (dark blue and green lines), They both used resnet18 and ADAM, the only difference being the size of the training set, with the former having 2008 columns and the latter 3008 columns. Compare with test2, the increase speed of test 1 accuracy will be slower, and the decrease speed of loss value will become full, but there is no significant difference between the highest accuracy value and the lowest loss value.

Test3(red line) also used resnet18 and ADAM, but its learning rate is set to 0.001, which is 10 times higher than the first two. Compared with Test 2, the image of accuracy and loss value fluctuates significantly, and the learning of accuracy value increases rapidly.

Test4(light blue line) is aim to try if use SGD instead of Adam. The same as test2 is the accuracy of the model increases rapidly, and the loss value decreases rapidly. However, the accuracy fluctuates between 94.5-91, and the fluctuation range is half of test2.

Test5(yellow line) is aim to try if use resnet34. Compared with the test2 image, the vibration is more obvious. The model may be over fitted, and the same learning rate may be a little high for resnet34.

Test6(purple line) is aim to try if use vgg. But high usage of memory occurred at epoch14, thus we set it to epoch=12 to see the rough result. The speed of vgg learning is very fast, both the accuracy rate goes up and the loss value goes down.

Test0, which aims to train our own CNN model, cannot control the variables without comparability because we use a different data augmentation than migration learning. It can be seen that the model learns quickly and the accuracy improves to 96.5% in the first epoch. After which there are small fluctuations, but increases overall. The loss rate drops sharply in the first 8 epochs and stabilizes at about 0.003 at epoch=10.