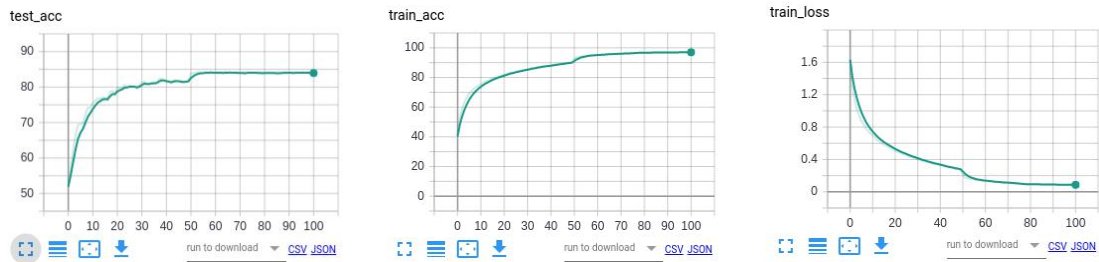# Report_AI_homework_1_由迪_1901213160

1 Report the final accuracy (10,000 steps) of training and testing for the CIFAR-10 dataset.
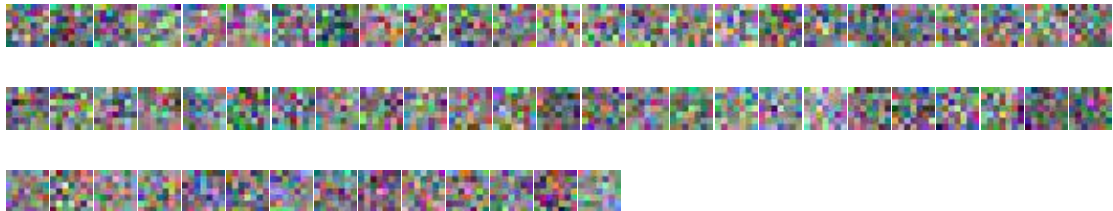
the final accuracy of training: 96.99%

the final accuracy of testing: 83.92%

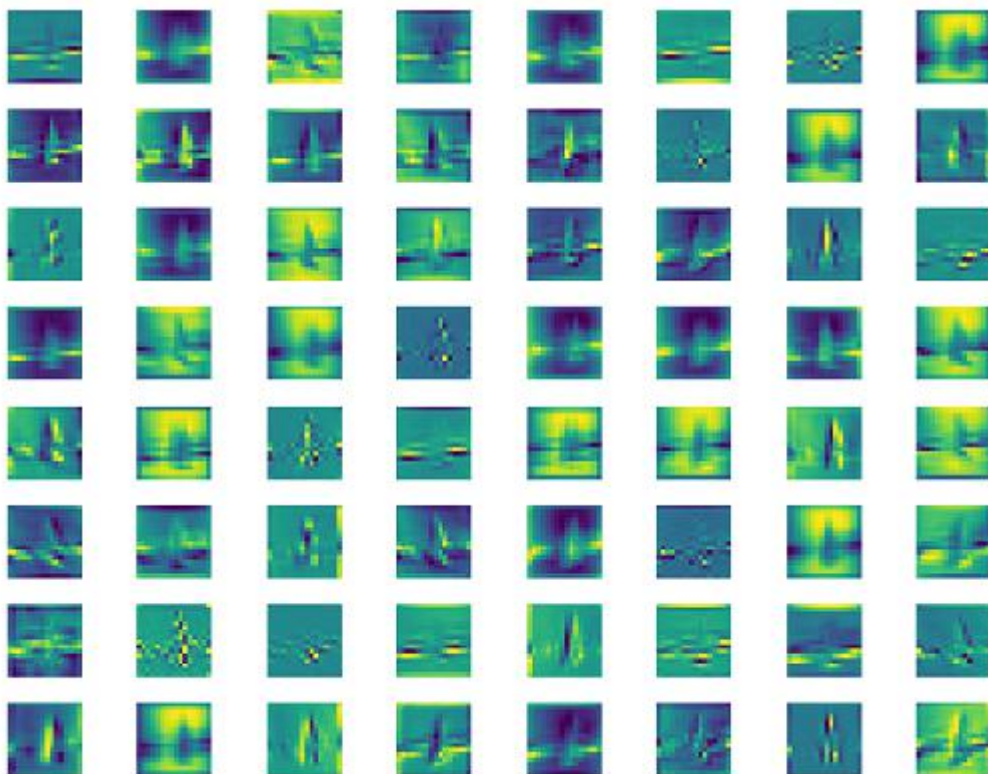**2 Visualize the learning progress (tensorboardX in Pytorch).**

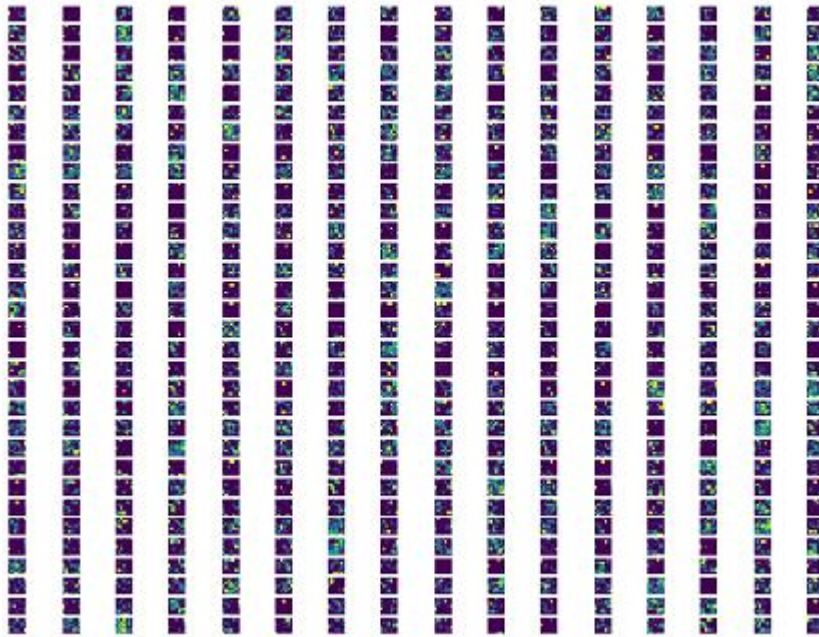**3 Visualization the 64 filters in the layer 'Conv1'**
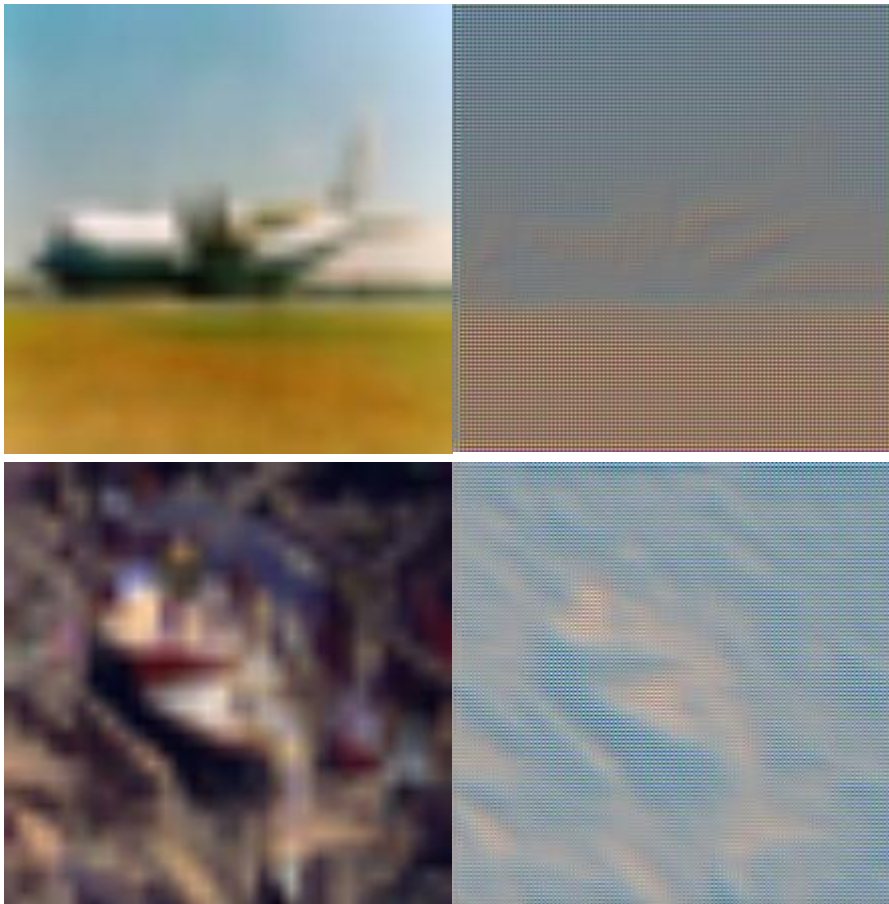

4 Feature mapping visualization

Visualize the feature maps of the layer 'Conv1'

Visualize the feature maps of the last layer in the block 'Conv5_x '.

the reconstructed patterns from the validation set that cause high activations in a given feature map and the corresponding image patches for each feature map:

5 Feedback

I spent 36 hours for this assignment. This course is very meaningful and deepens my understanding of image processing. This assignment is very practical and has exercised my ability. I hope I can learn more about PyTorch in the following lectures.

6 Reference link

https://github.com/dyhan0920/PyramidNet-PyTorch
https://pytorch.org/docs/stable/_modules/torchvision/models/resnet.html