The source code is at the end of this document

1   Classification: Convolutional Neural Networks

1.1   Design and Implementation Choices of your Model

The following CNN models are tested.

CNN1 is a basic CNN with one convolutional layer; CNN2 is similar to the network in the link given in the assignment; CNN3 is CNN2 with one more convolutional layer and max pooling layer; CNN4 is another VGG like network given in this link. In addition, all models in this blog are evaluated, but they have very similar performance with the previous ones so I will not show their structure below. Meanwhile, VGG19 model with imagenet pretrained weight and transfer learning of InceptionV3 were tested. Finally, I tried training a Resnet 50 and an Inception model from scratch, and the tutorial can be found here(Coursera CNN week 2 programming assignments) and here respectively.