Homework 8
Statistical Learning, Spring Term 2019
STAT760

Download the MNIST handwritten digit dataset from http://yann.lecun.com/exdb/mnist/

Problem 1 (15 points)

Train a neural network with only one hidden layer for MNIST using minibatches and dropout. Report the error rate over the test set.

Make experiments with different sizes of the hidden layer.

Train the same dataset using two hidden layers.

Problem 2 (5 points)

Download the CIFAR-10 dataset: https://www.cs.toronto.edu/~kriz/cifar.html

Print five images from the dataset (the images are RGB matrices).

Compute the mean value for the ten classes and print them.