Assignment #6 – Half Assignment!

This assignment is due on June 4th one hour before class via email to **christian.wallraven+EMS2019@gmail.com**.

Important: You need to name your file properly. If you do not adhere to this naming convention, I may not be able to properly grade you!!!

If you are done with the assignment, make one zip-file of the `assignment6` directory and call this zip-file `STUDENTID1_STUDENTID2_STUDENTID3_A6.zip` (e.g.: `2016010000_2017010001_A6.zip` for a team consisting of two students or `2016010000_2017010001_2017010002_A6.zip` for a three-student team). The order of the IDs does not matter, but the correctness of the IDs does! **Please double-check that the name of the file is correct!!**

Please make sure to comment the code, so that I can understand what it does. Uncommented code will reduce your points!

Part1 Train your own things with a CNN (40 points):

Take `Assignment6_CNN.m` with the parameters as given there and change it so that it works on your **own** image dataset [e.g., from

http://www.cvpapers.com/datasets.html

https://computervisiononline.com/datasets].

Try to find a dataset that has not more than ****5 classes**** and make the dataset such that each class has at least **1000** images.

Designate 90% of images of this dataset for training, and 10% for validation [here equivalent to the test set] and include the final accuracy on the validation set in the code.

Make sure to downsample the images to greyscale 28x28 pixels **and include the full dataset** as a .mat-file in your code submission. You may need to send me this as a google/dropbox/big-file link.