

Gebze Technical University
Department of Computer Engineering
BIL 665 / BIL 463
(Introduction to) Computer Vision
Fall 2016
HW5
Jan 10th 2017
Optional HW
No late submissions

In this homework you will implement a deep learning based digit classifier. We have discussed the LeNet digit classifier during the lectures and we saw how we can implement it using Digits and Caffe. In this homework, you will use NVidia Digits to train a deep network with the LeNet data, which is available at <http://yann.lecun.com/exdb/mnist/>. You will then use the trained network with the C++ Caffe interface to recognize digits from the live camera images. We will put hand written digits on a papers and show these to the camera to recognize the digits. You will output the recognized digit along with the confidence score on the screen. You may assume that there is only one digit in the image. You may also ask the user to place the digit in an area of interest.