

42028: Deep Learning and Convolutional Neural Network

Week 2: Lab-2

Instructions:

Setup Google Colab and Google Drive:

- Login to your Google Drive using your Student/personal email address
- Under “42028-DL-CNN-2020” folder, you should find “Week2-Lab2” folder. *Please note folder should be already there if you have executed the setup script in week-1.*
- From Canvas, download the following notebooks and image
 - 1. Week2-Lab2-EdgeDetection.ipynb**
 - 2. Week2-Lab2-MachineLearning.ipynb**
 - 3. NumPy-WarmUp.ipynb**
 - 4. new_image.png**and upload them to “Week2-Lab2” folder on your Google Drive.

Tasks:

1. **Numpy Warmup:** Optional, but recommended for those new to Python programming and NumPy
2. **Task -1:** Edge detection using Convolution operation and TensorFlow
3. **Task -2:** Machine Learning basics: Train and Test K-NN and SVM classifiers, an introduction to TensorFlow