Week 7 Assignment - MSc AIDA UoM

Professor Konstantinos Margaritis
Teaching Responsible Georgios Kyriakides

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In the following links, you can find examples of single hidden layer networks for the Fashion-MNIST dataset on Google Colab, using regularization:

1. `Keras Regularization`

2. `Keras Convolutions`

3. `PyTorch Convolutions`

Tasks:

1. Make a copy of the 2nd or the 3rd Notebook in your Google Drive in order to be able to edit them.

2. Use convolutional networks, regularization, and data augmentation to create models for the CIFAR-10 dataset (color images, size 32x32 with 3 channels), either for Keras or for PyTorch.

3. Create a convolutional network and train it (with whatever depth/width/optimizer/epochs you want, if you want, take ideas from known architectures). Plot the training progress and the network.

4. Try using regularization. Plot the new networks, train them, and comment on their behavior.