Deep Learning for Image Classification

Welcome to deep learning for image classification tutorial! **In this notebook, you will**:

- Learn the basics of PyTorch, a powerful but easy to use package for scientific com
- Learn how to build and train a convolutional neural network for image classificatior

If you have never used jupyter notebooks, nor Colab notebooks, here is a short intro.

I. PyTorch Tutorial

We will briefly go through the basics of the PyTorch package, playing with toy examples.

If you know already how to use PyTorch, then you can directly go to the second part of th

II. Training a classifier

In this part, we will train a Convolutional Neural Network to classify images of 10 differer performs on the test set.

III. Exploring CNN Architectures

This is the part where you get your hands dirty ;). Your mission is to experiment different obtain the best accuracy on the test set!

The following command sets the backend of matplotlib to the 'inline' backend so that the frontends like the Jupyter notebook, directly below the code cell that produced it:

```
%matplotlib inline
```

Plotting functions and useful imports

You can skip this part

```
# Python 2/3 compatibility
from __future__ import print_function, division

import itertools
import time


import numpy as np
```