# **TRAINING 2 - Vision**

#### 1 - Classifier - LeNet

Implement the well known LeNet model for predicting handwritten digits https://medium.com/@mgazar/lenet-5-in-9-lines-of-code-using-keras-ac99294c8086

### 2 - Object Detection - YOLO (PyTorch)

Try to implement the well known <u>YOLO</u> algorithm: <u>https://blog.paperspace.com/how-to-implement-a-yolo-object-detector-in-pytorch/</u>

### 3 - Serving models

Let's serve the models you implemented. Allowing "clients" to call it <a href="https://www.pyimagesearch.com/2018/01/29/scalable-keras-deep-learning-rest-api/">https://www.pyimagesearch.com/2018/01/29/scalable-keras-deep-learning-rest-api/</a>

## **Cool applications:**

- Colorize image (PyTorch) <u>Demo</u>
   https://lukemelas.github.io/image-colorization.html
- Neural style : <u>Demo</u>
   <u>https://github.com/leongatys/PytorchNeuralStyleTransfer</u>
- Human Pose estimation:
   <a href="https://www.learnopencv.com/deep-learning-based-human-pose-estimation-using-opencv-cpp-python/">https://www.learnopencv.com/deep-learning-based-human-pose-estimation-using-opencv-cpp-python/</a>