Projects

For the last weeks of the semester, you will have to implement a mini-project.

The topic of the project is: **do a classification and/or regression task on a dataset, using one of the usual machine learning algorithms"**

Examples:

- image classification with CNN networks
- classification or prediction on other data, using MLP networks or logistic regression
- any other idea, with any other algorithm you may know or want to use

I will provide you with datasets, or you can use your own,

The coding part can be done in Matlab or other languages you may know (e.g. Python).

The project should be finalized with a written report (a few pages), which should discuss:

- the dataset used (what it is, specific details, image examples, anything of interest)
- what is desired
- the algorithm used, and how you used it
- results: classification results, training results (if relevant), any other graphical or numerical result relevant for the problem

The projects must be presented in the last week or sometime during the exam session, before the exam.

Tips'n Tricks and other instructions

- If the dataset is too large, you can use only a smaller part of it (i.e. classify between 2 or 3 classes instead of 100)
- Images can be resampled to a desired resolution (e.g. 224 x 224 for AlexNet)
- Small MNIST like images (28x28) can be used with MLP networks. The images can also be resized to larger values such for CNNs to be used (e.g. 224 x 224 for AlexNet)