Deep-Learning: Tutorial 1

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1 Installing Instructions

Before we will dive together into the practicals it is important that each of us will be on the same page regarding the setup that we will be using from now on. Therefore, be sure to follow all coming steps that are required for dealing with this year's Deep Learning practicals.

- Be sure to have the `Anaconda` python package manager installed on your laptop. We will need this in order to setup a 'virtual environment" in which we will be running all the code. You can download `Anaconda` from here: `https://docs.anaconda.com/anaconda/install/`
- Install `GitHub`. All the material of the course can be found there, ranging from the theoretical lectures, to the practicals and the instructions for the project. This year's course information can be found at: `https://github.com/glouppe/info8010-deep-learning`.

If both `Anaconda` and the `GitHub` repository are on your computer we are ready to set up the 'virtual environment" that we will be using from now on. Follow the following steps:

- Go to `./tutorials/lecture_01/installation/`
- Install the `Anaconda` environment and wait for all packages to be installed

```
conda env create -f environment.yml
```

- Once all libraries have been installed we can 'activate" the environment. The name of the environment is `deep_learning`

```
source activate deep_learning
```

You are now ready to start the practicals. Today's practical will be about basic tensor operations and a brief exercise about Polynomial-Regression which will help you get familiar with the `PyTorch` library. All practicals will be found in `./tutorials/lecture_01/notebooks/` where you will find a `jupyter-notebook` containing the instructions you need for today's assignment. You can start with the first practical by simply running

```
jupyter-notebook deep_learning_practical01.ipynb
```

By the end of today's lecture I will push the solution of the exercise and we will go through it together.