Machine Learning for Agricultural Applications

Assignment 0

Prof. Dr. Niels Landwehr
Dr. Julian Adolphs

Summer Term 2020

Release: 23.04.2020
Discussion: 30.04.2020

Task 1 – Running Python [0 points]

Find out how to run python on your computer or in the cloud. On Linux computers, the simplest way is to run the default installation of python in the shell. Make sure to run python 3 (not python 2). Probably you have to start it with '`python3`'. You can use python now interactively in the shell. If you what to run a script, you have to start it in the shell with: '`python3 script.py`'. The more recommendable way to run python is via an Anaconda installation using the Spyder IDE. But for the beginning the simpler way above is ok. Another way is to create an account on Google Colab and run your code there. For machine learning we will need that anyway later, because you can run your code there on GPUs (which can be much faster than on CPUs).

Task 2 – Python Basics [0 points]

Learn or refresh your python basics. You can for instance take the python basic course on Kaggle `https://www.kaggle.com/learn/python` or take the freeCodeCamp.org course `https://www.youtube.com/watch?v=rfscVS0vtbw` on YouTube. If you are already familiar with python, you can skip this point or look for a more advanced python course (you don't need advanced knowledge in python for our course). Also check out `www.python.org`

Task 3 – NumPy Basics [0 points]

Learn or refresh your NumPy basics. You can for instance watch this YouTube video:
`https://www.youtube.com/watch?v=8Mpc9ukltVA`
Also have a look to `www.numpy.org`

Online Exercise Session

Although there is nothing to present and there are no points for this 0-th excercise sheet, we should have a short online meeting on thursday 30th (16:15 h) for checking out, if the video conference software works for everybody. Additionally, you can ask your questions.