

## Exercises #6

Solutions should be submitted in teams of two if possible. Due to the current COVID-19 pandemic please submit your solution online using the sciebo file-drop folder. The link will be available in ILIAS. Please submit a single zip file with the following naming scheme: `username1-username2.zip` (e.g. `jadoe101-jodoe108.zip`). For submission use the provided shell script. Make sure the total file size does not exceed 10 MB.

### 1. Fully-connected neural network

On a previous sheet you implemented a fully-connected two-layer neural network on CIFAR-10. In this exercise we will introduce the modular layer design. You may use those layers to implement fully-connected networks of arbitrary depth. To optimize these models you will implement several popular update rules. For detailed instructions please we refer to the Jupyter notebook *fully-connected.ipynb*.

*100 points*