

Machine learning in physics

Assignment 2

April 7, 2021

important notes:

The deadline is April 16th

Let's build a classifier!

- You should develop your own **classifier** and you should use all things that you have learned from the course until now.
- It is recommended to develop a logistic regression model that outputs the probability of different classes.
- It is recommended to develop an object-oriented implementation, where similar to the scikit-learn library, the classifier is an object with functions for training and predictions (i.e. `predict()`, `fit()`, and so on).
- It must have the capability of using different loss functions (penalty) and different optimization methods which can be assigned to the model.
- Then choose a dataset and test your model. Try it with different loss functions and optimization methods.