Deep Learning: Homework 3
Deadline is 27.10.2020, 23:59

October 19, 2020

Your task is to predict whether a patient has heart disease or not. You can download and see information about data by following this link. You should do the following steps in your homework:

a) Keep 20 percent of the data for testing.

b) Do logistic regression and try to find the best hyperparameters (using sklearn).

c) Normalize your data using standard normalization and then repeat the previous step.

d) Try to find the best neural net to solve this problem which will have no more than 2 hidden layers (use sklearn).

e) Normalize your data using standard normalization and then repeat the previous step.

f*) Do the step d) using tf.keras.

g) Compare accuracies of all obtained models.

Remarks:

1. You will not get a full grade, if you don't have more than 85% accuracy on the test dataset in at least one of the steps above.
2. Exercises with asterisks are supplementary and will not be graded.
3. Don't forget about train, validation and test sets.
4. Use jupyter notebook for writing your code.
5. You can use google for any question, but don't do copies of others' codes.
6. You can ask me whatever you want and whenever you want.