Statistical Machine Learning 2017

Final Project Specification

In the final project, you are supposed to select two algorithms and apply it to the three digit recognition problems:

- Data from single persons
- Data from all persons with a training set that includes data from all persons
- Data from all persons where the training set does not include data from the persons in the test set

For all problems all persons shall be included.

Of course you are also allowed to combine algorithms to boost performance.

Take the following issues into account:

1) Give a brief intuitive summary of the two chosen algorithm.
2) Describe your preprocessing.
3) Optimize parameters on a smaller set and document this optimization process.
4) Do a proper cross validation for the last two problems and indicate also variances for all problems.
5) Analyze the results and give proper explanations.
6) Give an indication what could be further improved.

It is very likely that we will start with discussing your report in the exam. Hence you will probably have a good starting position, when the report is done properly.

You can make group reports. If you want that the written report will be part of the evaluation, you need to indicate who has written what part. Otherwise only the oral exam can be taken into account.