



# Advanced Machine Learning: Introduction to practical assignments

Fabian Laumer, Robin Geyer

Link to website:

<https://aml.ise.inf.ethz.ch/>

(Only accessible within ETH network)

Task 0: Dummy task, excluded from grading

Task 1 - 4: Graded, based on medical data

## PROJECT RULES

The project is a graded part of the course. You are required to adhere to the following general rules. Note that the individual tasks of the projects may specify additional rules.



### INDIVIDUAL RESPONSIBILITY

You are required to participate in and contribute to every task of the project (even when working in a group). It is your individual responsibility to hand in solutions to each task on time.



### GROUP WORK

You may work in project groups as specified in the individual task details. It is your individual responsibility to form a group among your fellow students. Once you have joined a group for an individual task, you may not leave the group (even when your groupmates drop the course). You may choose to form different groups for the different tasks.



### COLLABORATION

You are only allowed to collaborate within your group. In particular, you may not share code or provide details on how to solve the task to students outside your group. You may discuss general, non task specific questions about the contents of the lecture freely with other students.



### DEADLINES

All deadlines are strict and we do not accept late submissions. It is your individual responsibility to start with the task early enough so that you can hand in your results on time. In particular, submissions can take a substantial amount of time to run on the server and we may take the submission server offline for up to one day.



If you do not follow the project rules, you may get zero points on the project and risk a notification due to "Dishonest conduct".



I have understood the rules and agree to abide by them.

I do not agree to the rules.



# Task procedure for tasks 1, 2, 3 and 4

## 1. Task opens

- Create groups
- Read task description and download data files (train.csv, test.csv, sample.csv)

## 2. Solve task

## 3. Submit solutions

- Submit a file which holds your predictions for the data in test.csv (should look like sample.csv)
- Depending on the task, your number of submissions is limited (e.g. 10/day and 100 in total)
- A submission has to be 'handed in' in order to be graded (**by every group member!**)
- Your performance then appears on a public leaderboard
- When 'handing in' you have to give a brief explanation of your methods

# Task grading

- There are two leaderboards:
  - Public: visible as soon as the task opens (~50% of test-data used for ranking)
  - Private: visible after the task closes (remaining test-data used for ranking)
- There are three baselines (easy, medium, hard) on each leaderboard:
  - In order to take the exam, you have to pass the easy baseline on the **public** leaderboard of at least three tasks.
  - However, Your overall-project score (which makes up 30% of your final grade) is determined **only** through the performance of your best three tasks on the **private** leaderboard.
- Be careful not to overfit on the test-data used for the public leaderboard
  - Do not use your public score as the sole metric for your model's performance
  - Use cross-validation and/or other validation methods