DATA11002 Introduction to Machine Learning (Autumn 2021)

## Exercise Set 2 – schedule

In this document, you can find a *suggested* schedule to do the Exercise Set 2 (E2). The purpose of this document is to help you plan your studies. E2-related dates are in **red color**.

It is assumed that you follow the lectures and that you read the corresponding textbook sections before each of the lectures.

It is not possible to grant extensions to the E2 answer deadline. If you do not submit your answer in time, you will lose not only the answer points but also the peer review points. Therefore, please submit your solutions after each of the "red blocks" below, after you have already solved some problems. It is possible to update your submission in Moodle until the deadline. This way you will not lose all points due to some last-minute internet or pdf conversion problems

If there are tasks that are difficult and take lots of time, I suggest that you first solve the easier problems and only then attempt to do the more time-consuming ones. You can ask for advice in Slack or in the exercise sessions. Also remember that you can get full exercise points even if you do not solve all problems or tasks, so it is not necessary to have perfect solutions to all tasks. Often a non-perfect solution is better than no solution at all.

**Wednesday 17 November.** Lecture on discriminative probabilistic classifiers.

After 18 November and before 19 November lecture: Do Problem 9 on logistic regression.

Friday 19 November. Lecture on generative probabilistic classifiers.

After 19 November and before 24 November lecture: Do *Problem 8* on Naïve Bayes and *Problems 10-11* on discriminative vs. generative learning.

(While doing problems 8 and 10-11 you can attend the **22 November** exercise session which is mainly about peer review of E1, but you can also ask of E2.)

Wednesday 24 November. Lecture on k-NN and tree-based classifiers.

After 24 November and before 26 November lecture: Do *Problem 12* on decision trees and *Problem 13* on nearest neighbor classifiers.

Friday 26 November. Lecture on SVM

After 26 November lecture and before 29 November exercise session: Do *Problem 14* on SVM.

Monday 29 November. Exercise session 3 (solving E2). Participate to the exercise session, where you can discuss any remaining unclear problems and/or the topics of the Block 2 in general. Do *Problem 15* (learning diary) and submit your solutions to Moodle.

Friday 3 – Tuesday 7 December. Try to grade the problems at Moodle.

**Tuesday 7 December.** Participate to the exercise session, ask if anything in the solutions of E2 is unclear for you, finish the grading, and submit your gradings to Moodle at the end of the exercise session.