## 1

## Response to Student Feedback received for the course CS-EJ3211 - "Machine Learning with Python" offered during May - July 2020 at Aalto University and within FiTech https://fitech.io/en/

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We express our sincere gratitude for the constructive comments and suggestions provided by the students of the course CS-EJ3211 "Machine Learning with Python" as offered during summer 2020. We have tried to address all comments to the extent possible. Major modifications we implemented include the following:

- We now try to make the attendance of online lectures more attractive to students. These lectures allow for asking and discussing questions of students. ??? offer bonus points for constructive and relevant contributions to discussion during online lecture ??? However, we still make recordings of all lectures and talks available throughout the course.
- We will now use MyCourse quizzes to grade the coding assignments. These quizzes consist of multiple choice
  questions which should be answered with the support of the Python notebooks. Using MyCourse quizzes has the
  advantage of allowing for immediate feedback to student submissions.
- We have revised the course schedule with having the six rounds as a bootcamp during the first half of the course, and the second half focusing on the student projects.
- We will now use peer grading of student project reports to facilitate student-student interaction.
- We will award bonus points for constructive contributions to the course discussion forum ("Slack"). We hope that offering these bonus points will support the student-student interaction.

In what follows, we respond in a point-by-point fashion to selected student feedbacks received for the "2020 summer" course edition during the official feedback survey carried out for courses at Aalto university. The student feedbacks are enumerated as S1,S2,... and the corresponding response as R1,R2,...

- S1 Some of the task descriptions were phrased in an unclear way.
- R1 We have revised the notebooks carefully to avoid any misunderstandings.
- S2 Lectures can explain more about programming part
- R2 We will now make more references to the Python notebooks during the lectures.
- S3 The schedule of the course could have been better informed, such as when does each of the round start and when are their deadlines.
- R3 We will announce the schedule well before the course starts via the MyCourses page mlwithpython.cs.aalto.fi

- S4 More examples would be useful
- R4 We plan to use peer grading for the student project reports. During the peer grading, students learn about the machine learning problems considered by other students.
- S5 On-the-fly feedback on the assignments: not only "sanity checks".
- R5 We plan to use MyCourses quizzes to replace the auto-graded student tasks in the Python notebooks. These MyCourses quizzes provide immediate feedback to student submissions.
- S6 Lecture times could be announced a bit earlier
- R6 We will try to be more timely and clear in the announcement of lecture times.
- S7 Lecture times could be announced a bit earlier
- R7 We have now created a dedicated Section on the Mycourses page (mlwithpython.cs.aalto.fi) entitled "Lectures and Talks" which lists the times of lectures and talks. We will try out best to finalize this list before the course starts.
- S8 The grading is quite easy for students and does not at itself encourage to do the obligatory projects, as the project topics were quite challenging. Could be better if the project was a semi-mandatory part of course but a bit easier and smaller in scale.
- R8 The student projects are not meant as obligatory but rather as another task that can be used to earn points. However, we will adapt the course schedule (bootcamp during first period and then plenty of time for project) to make student projects more attractive. Moreover, we will provide more examples for student projects.
- S9 I think I also lacked more content on the lectures which would tie homework with theory. Most of the time I felt that theory is too high-level and assignments are too specific. This gap needs to be bridged with some demo sessions or seminars where theory for topic X is joined with some practice before doing the assignments.
- R9 We will try to have more references to the coding assignments during the lectures. In particular, we plan to walk through parts of the notebooks during the lectures.
- S10 It might be my preference only, but it would have helped me a lot more to have the tasks in a notebook and the learning material for the specific round in a PDF or some downloadable format. When I wanted to revisit a topic while working on the tasks, it was difficult to scroll and find the material or to have to reopen a previous notebook and scroll to find some information I wanted to revisit. I believe it would have helped me out a lot to have the tasks and learning material in separate files.
- R10 We will now provide pdf printouts of the Jupyter notebooks for students convenience. These printouts can be found at the MyCourse page under Section ????
- S11 Some of the bonus task have a too high score.
- R11 We will adjust the maximum number of points awarded for the bonus tasks.
- S12 The notebook have sometime part that are too adavced for the course.
- R12 We have adjusted the amount of background information (e.g., interpretations of certain parameters) provided in the notebooks. Moreover, we now provide more pointers to background reading (beyond the scope of the course).