DDA4210/MAIR6002 Advanced Machine Learning
Guidance and Policy of Course Project

Please read and study each item carefully. If there is anything unclear, please let us know.

1 Course project description

- Weight in the final grade: 35%.
- Format: Python programming for advanced machine learning
- Topic: determine it by yourself or choose from the given examples
- Teamwork: 1 to 4 members per team
- Outcome evaluation: $[\textbf{repert}(25\%) + \textbf{presentation}(75\%)] \times r_{\textbf{ind}}$
  - the report includes both the PDF (20%) and codes (5%, Python).
  - presentation: 75% = 10%(peer) +25%(TA) + 40%(instructor)
  - $r_{\text{ind}} \in \{0.5, 0.8, 1\}$: it is rated by your teammates on your contribution. 0.5 (or 0.8) means your contribution is less than 20% (or 50%) of the expected workload (namely, average workload, overall workload of the project divided by the number of members in the team). If your contribution is equal to or larger than 0.8 of the expected workload, you will get $r_{\text{ind}} = 1$.
- Evaluation criteria (for both report and presentation) and guidelines:
  - significance (25%): the problem you studied should be interesting and hasn't been well-solved.
  - novelty (25%): at least one aspect of your problem, data, and method is novel. Do not apply an existing method to an existing dataset to solve an existing problem. You may collect or create a new dataset, propose a new problem, devise a new method, or modify an existing method.
  - technical soundness (25%): the techniques of data collection, processing, modeling, analyzing, etc., you used, should be reasonable, correct, and explainable.
  - completeness (25%): your report and presentation should contain the necessary and important information, description, explanation, or/and discussion, etc., about your task, data, method, and results.

2 Policy on presentation

- The presentation date hasn't been determined. But it is usually a few days before the final exam.

- The order of presentations will be determined randomly.
- Every group must finish the presentation in 13 minutes.
- Exceeding the time limit will trigger a score deduction (-0.5 points per 0.5 minutes).
- There will be a 2-minute QA session after each presentation.
- The presentation of each group can be done either by one member or by all members.
- During the presentation, in the classroom, there must be at least one student in your group to review and rate the presentations of other groups. Otherwise, the score of your group will be discounted by the proportion of other groups you rated. For example, suppose the score of your group is s and your group only rated 10 out of 15 groups, your final score will be $2s/3$.
- The file name of your presentation slides/PPT/PDF should be in the form of 'Pre_Group_Num'. The group number will be assigned later.
- Please show the names of all members of your group on the first page of your slides.
- Some suggestions:
  - The presentation (as well as the report) may contain the following parts: introduction or background (may include the significance of the study), data collection or/and preprocessing, methodology, numerical or experimental results, and conclusion.
  - The number of your slides should be less than 18.
  - Before the presentation day, think about possible questions that may be asked by the instructor, TAs, and your classmates.
  - Make sure that you know all the details you presented in your slides.
  - Please raise questions actively.

3 Policy on report (including codes)

- The due date of the report hasn't been determined but it is usually one week later than the final exam.
- The length of each report is 4 or 5 A4 pages not including references.
- There is no uniform report template; single column or double column can be used; recommended to use the conference paper template on overleaf.
- The name of your report pdf/zip should be in the form of 'Report_Group_Num'.
- Please show the names of all members of your group on the first page of your PDF.
- You need to submit your codes together with your report. Otherwise, you will lose 5% of the project score. Make sure that your codes can be run correctly. We will check it if necessary. If your codes cannot be run correctly, you will get a discounted score for the code part. The evaluation for the codes is based on clarity and reproducibility.

We will select the top 3 course projects (according to the presentation score) as the best course projects and provide certificates.