Machine Learning
Term Projects

You are required to select and complete a research project in a machine learning by the end of the term. Choose the topic in consultation with the instructor.

You may work individually or in small groupsof 2 to 3 students. An ideal project is a one that demonstrates some creativity, attempts to answer some interesting research questions, or offers an interesting machine learning solution to a problem of practical interest. However, you are not required to complete an original research work. You can pick a project that has been done and repeat it. But you must be able to make some interesting analysis such as comparing and understanding the behavior of tuning different hyperparametersor comparing different models. You must be able to change and modify the code of your project and you must understand every line of the code that you are using.

If you work in a group, the group is expected to do more than a single person. There has to be a clear understanding of each group member's contributions to the project.

Timeline

9/10/2022: Proposal: submit a written half to one page about your project topic an outline of what you want to accomplish during your project and how you will do it. For example, studying the effect of the learning rate value on the performance of the model for a particular problem. Or studying the impact of different regularization techniques on the performance of a problem. If working in a group, on this day you should submit your groups names.

25/10, 15/11/2022: A one-page short progress report that would describe method that you are using, datasets, and preliminary results.
25/10/2022 – progress report-1
15/11/2022 – progress report-2

1/12/2022: Project due:A written report on the project summarizing your results and the complete code in a zip file.

4/12/2022: Presentations: a 15-20 minutes presentation. If working in group, all group members must present.

Final project report

Your final report is very important. It is as important as your results. The report will be graded based on originality, organization, and clarity of presentation, and

the bibliography, as well as the significance of the results. In short, it will be evaluated as though it is being refereed for presentation at a conference.