

# Requirements for the Final Report

**Upload pdf only.**

**Deadline: May 3, 2022 until 23:59 (Norwegian Time)**

- 1) Your final report can be an article (conference or journal) in a publishable format or a technical report in an “**Advanced**” level.
- 2) The report should be suitable for someone with a decent ML background but not familiar with your chosen technique and application (hypothetically). Then, after reading your report, s/he can be an expert on your chosen technique/algorithm and implement and replicate your work. Also, s/he will have enough knowledge about your chosen technique's advantages, disadvantages, implementation, analysis, and, off-course, your chosen application.
- 3) If you choose to submit an article format, we can discuss the submission format that suits your technique, application, and targeted conference/journal.
  - a) A similar article like your chosen one for Presentation-2 can be an example.
- 4) **If you choose to submit a technical report, it must be at an advanced level containing all about the chosen technique/algorithm, implementation, analysis, discussion, justifications, and chosen applications.**
- 5) In short, the report should contain all the points mentioned in Points (1) and (2) of the “Course Structure” (see below also).
- 6) **You do not need to include the code within the report.** However, you need to mention an online storage (like github) where I can download the code and run it in my own system to test the implementation and results. Your instruction to run the code within the report is highly appreciated.

## **Point-1:**

First, the report should contain the discussion/analysis of your chosen ML technique/algorithm to a high level of understanding. It means:

- 1) What is this technique/algorithm?
- 2) Why is it special?
- 3) How is it different from other similar technique(s)? With practical example(s), if possible.
- 4) Its working principle – working flow, equations, analysis, etc.
- 5) Advantages and disadvantages.
- 6) It's applications, with the justification of why your chosen technique/algorithm is particularly suitable for this type of application(s) than that of similar existing ML technique(s)/algorithm(s).

## **Point-2:**

Secondly, the report should describe the implementation of your chosen technique to solve a practical application which you already presented in your 2<sup>nd</sup> presentation. The report should also contain the comparison/analysis of your achieved results to an “**Advanced**” level. It means:

- 1) You need to explain the implementation at a detailed level so that others can replicate your work.
- 2) You need to describe and analyze your results. This means that
  - a) You must point out your justifications for why you are getting such results (results may be good or bad).
  - b) Your results must support your justification.
  - c) You need to compare your results to other results that were achieved by different similar technique(s)/algorithm(s) on the same application.
    - i) Other results can be from the article chosen for your second presentation.
    - ii) Note that if you implement your chosen technique on an application that is a new practical application, we can discuss the type of comparison and analysis that you should include in your final report.

## **Note that:**

The required analysis/comparison mentioned in Point-2 must be at an “**Advanced**” level. It means:

1. It is not enough to only compare the achieved results. You should justify why your results are better or worse than the comparing results.
2. If your achieved results are worse than the comparing results, you also need to justify the reason and should include your thoughts about improving it.