CS3244 Project Presentation Rubrics

This document gives the evolving grading rubrics for the CS3244 group project. Note that this rubric just pertains to the recorded presentation that groups deliver. Your marks for other parts of the project's management, intra-group communication are factored separately.

Revision History:

- *17 Oct 2021 – Stated deliverables in first section.*
- *10 Oct 2021 – First release.*

Deliverables

Due on 28 Nov 23:59 (Exam Week 1)
Consist of the (pre-)recorded **project presentation video** and any **supporting materials**:

- source slides,
- zip archive to source code and
- statements of independent work.

There is no project report or project poster deliverable unlike in previous years. Project rubrics have been released in LumiNUS files and the live document is pinned to #projects.

Content

- Originality:
  - How much original elements are done in the project?
  - It's not necessary that no other team has done your tasks before, but it needs to reflect your ability to think analytically.
- Relevance:
  - How strongly connected is the project to this course?
  - Do you use core concepts of ML mentioned in the class.
- Related Work:
  - Do you present a sufficient and extensive study of related work to the task? Formal academic references, useful web articles and posts material, and other related work should be considered in this aspect. Remember to cite explicitly.
  - Do you articulate how your work is novel when compared to prior work?
- Clarity
  - Is the motivation for your task clear, plausible and rational?
  - Is the problem statement well-defined using machine learning terminology?
  - Is the technical approach described clearly and detailed enough for your peer learners to understand and replicate? Is iit sufficiently well-organized to omit less relevant information that should be common knowledge to fellow classmates? Or relegate less important information to supplemental materials?
  - Is the evaluation method described clearly and detailed enough for a peer to replicate?

    - Are the evaluation results described and interpreted clearly? Do not just report numbers, but illustrate (with figures, tables), and explain them. Do not assume that your audience knows what your numbers mean.
- Soundness / Validity of Technical Approach:
    - Is your technical approach suitable to try to solve your proposed problem?
    - Is your technical approach valid for your prediction task and dataset?
    - Are there technical flaws in the execution of the approach?
    - Are evaluations performed with the appropriate metrics and correctly interpreted?
- Model Evaluation
    - Do you address both macroscopic, dataset-wide level performance (e.g., RMSE, Accuracy, F_1 measures) as well as microscopic, individual instance level performance (careful error analysis with diagnosis)?
    - Do you demonstrate improvement in performance from one model to another? A baseline model may be an implementation of a simpler model or version of your model, or referenced from other literature (make sure to give appropriate citations).
    - *Note that your performance need not be very high (e.g., 90%) if your data problem is hard. But you should show improvement over some baseline approach.*
- Persuasiveness and Justification
    - Do you justify why your approach is correct and favorable against other methods considered? I.e., justify your choice of method.
    - Do you justify technically why your model is good or has improved? I.e., rationalise your approach's performance effectiveness.
    - Error analysis: Explain, with evidence, why the model may be performing poorly (or not as good as you wish).
    - Future improvements: Discuss how you may further improve your model.
    - *You do not have to implement or test all your ideas, if too infeasible. Though discussing them helps to show your grading staff that you have good and valid ideas.*

Presentation

- Video Quality:
    - Time Control - Whether you complete an efficient presentation within the specific time frame. Do you allocate a reasonable balance of time within the presentation time limit to cover each component as comprehensively as possible?
    - Production Quality: How good is the production value of your video? Are both audio and visuals well-connected? Are both channels of communication used to communicate effectively?
- Visual Component:
    - Are the slides or presentation materials error-free and do they logically present the main components of the topic?
    - Are the materials neat, colorful or visually creative?

    - Are the materials readable? Do the graphics highlight and support the main ideas?
    - Do you use the most appropriate presentation means — slides, video, demonstration, or other audio/video vehicle — to convey your component's message most compellingly?
- Oral Component:
    - Are the speakers audible and fluent on their topic?
    - Is the audio narration articulated well (No mumbling, with few pauses and verbal fillers — "um", "uh", "er", is the text summarized and not read directly? Do the speaker(s) speak with enthusiasm, poise and assurance?