HTIN5005 Assignment 2 (20 Marks)

Topic:

Reimplementation of an algorithm in the chosen paper and an associated report.

Submission deadline:

Thursday, 24 October (Week 12). Note that this is group work, students can work either as a team of up to 2 people. or individually.

Assignment details:

1. Read the open-source code of the chosen paper in Assignment 1 if applicable. You are free to choose another paper from your literature review for the implementation.

2. Find the open-source dataset associated with the paper if applicable or a similar dataset.

3. Reimplement the chosen algorithm. You can use the open source directly, this will not count as cheating, but remember to include essential citations and acknowledgement. Apply the algorithm to the dataset you found and achieve similar results as the chosen paper.

4. [Bonus] If you have ideas for improving the chosen algorithm and achieve competitive results, you can achieve a bonus.

5. Prepare a report containing an introduction of the chosen algorithm and dataset, the techniques you use in the algorithm, the experiments and results compared to the chosen paper and meaningful conclusions and discussion.

Late submission:

Suppose you hand in work after the deadline: If you have not been granted special consideration or arrangements

- A penalty of 5% of the maximum marks will be taken per day (or part) late. After ten days, you will be awarded a mark of zero.
    - e.g. If an assignment is worth 40% of the final mark and you are one hour late submitting, then the maximum marks possible would be 38%.
    - e.g. If an assignment is worth 40% of the final mark and you are 28 hours late submitting, then the maximum marks possible marks would be 36%.
- **Warning: submission sites get very slow near deadlines. Submit early; you can resubmit if there is time before the deadline.**

Marking Rubric:

Category	Criterion
Report [12]	Introduction [2] ● What's the aim of the study? ● Why is the study critical? ● The general introduction of the algorithm. ● Introduction of the chosen dataset.
	Techniques [4] ● The principle of your new method and/or the method used in the chosen paper. ● Justify the functionality of each building block of the chosen algorithm.
	Experiments and results [3] ● Explanation of the experimental setup ● Reproduce the results (e.g., Tables/Figures) in the chosen paper ● Discuss the experimental results ● Justification of the results that are not reproduced if applicable
	Conclusions and Discussion [2] ● Meaningful conclusion and discussion (e.g., future works).
	Other [1] ● At the discretion of the marker: for impressing the marker, excelling expectation, etc. Examples include fast code, using LATEX, etc.
Code [5]	Code is complete and runs within a feasible time [1]
	Code can reproduce the experiment results in paper [3]
	Essential and clear comment on code blocks [1]
Assignment Presentation in Week 13 [3]	Clearly present the idea of the chosen paper and results with slides [1]
	Fluency presentation and appropriate body language [1]
	Peer review [1]
Bonus [2]	Justification of your novel ideas that improve the algorithm [1]
	Any new experiments you come up with [1]
Penalties [-]	Not including instructions on how to run your code: [-5]

	Fail to cite or acknowledge any source code that your implementation is based on [-5]
	Late submission

Instructions to hand in the assignment

- Go to Canvas and upload the report. The report should include each member's details (student ID and name).

  If you work as a group, only one student needs to submit the report which must be named as student ID numbers of all group members separated by underscores. E.g. "xxxxxxxx_xxxxxxxx.**pdf**"

- The report must include **a link of your code, model and data** (e.g., a shared Google cloud folder, so we can easily run it on Colab). Clearly provide instructions on how to run your code in the appendix of the report or include a readme.txt in your shared folder.

  Don't update the code/data any more after the submission. If the latest modified time of the shared folder is significantly late after the submission deadline, the whole submission will be taken as a late submission.

- There is no special format to follow for the report but please make it as clear as possible and similar to a research paper.