

COMP4702/7703
Machine Learning

Final Examination
Semester 1, 2021

This exam has a single task which should be completed. Intentionally, there is considerable flexibility in how you choose to complete this task.

Task

In the Practical classes for this course, you have implemented and/or applied a range of different machine learning techniques/models/algorithms. For this exam, you are required to demonstrate your ability to apply one or more of these machine learning techniques/models/algorithms to a dataset provided with this exam. Write a document that describes your method, results and analysis, including graphs and plots, code and output. Screenshots are also fine.

Key points:

- It is understood that you have limited time to complete the exam which limits the amount of work that you can do. That said, knowing about the exam question in advance means that you can plan and prepare your approach.
- You can use any code that you developed during the course (e.g. while completing pracs and homework), as well as built-in Matlab, python functions/libraries and software used in the course such as WEKA and Netica. If you use other libraries then you must reference them and they must be publicly available.
- Explain key steps of your analysis (data preprocessing, training, testing, visualization, etc.).
- Present any results and output from your work. Add comments and discussion to demonstrate that you understand the results and output.
- Don't spend time introducing general background concepts or describing the theory of models from the course. However, if you can relate your analysis and results back to the concepts and theory from the course then that will be a positive for your marks.
- Make sure your work is understandable and readable but don't spend a lot of time making the presentation neat and polished.
- Please specify any assumptions you have made in completing this examination and which part of the exam those assumptions relate to. You may also include queries you may have made, should you have been able to 'raise your hand' in an examination room.

Your answer for this exam should be uploaded as a pdf file in the turnitin submission link provided.