

COMP3222 Indicative Coursework Marking Scheme (worth 50%)

Introduction and Data Analysis (20)

- (0) There is no introduction or data analysis
- (5) The problem and data description is too brief, not very clear or incomplete.
- (10) The problem and data are described fully, but explicit characteristics are missing (e.g., data format, data volume, data quality, data bias, feature analysis, computation speed needed, number of classification classes needed).
- (15) The problem and data are described fully, with an incomplete list of explicit characteristics.
- (20) The problem and data are described fully, with a comprehensive list of explicit characteristics.

Algorithm Design (35)

- (0) There is no algorithm design described (e.g., pre-processing, feature selection, dimensionality reduction and machine learning algorithm).
- (10) The algorithm design is described, but it is too brief, not very clear, incomplete or does not or does not reference the techniques described in the course text and wider literature.
- (20) The algorithm design is described fully (so the reader could reproduce work if needed), but there are either unreasonable or missing justifications given for the design choices made.
- (30) The algorithm design is described fully, and reasonable justifications are provided for all design choices made (e.g., explaining why a choice was made in the context of the wider options available and data characteristics).
- (35) The algorithm design is described fully, reasonable justifications are provided for all design choices made and reference to work in the wider literature is cited for extra context.

Evaluation (35)

- (0) There is no evaluation of the designed and implemented algorithm described.
- (10) An evaluation is described, but it is too brief, not very clear, incomplete or lacks rigour.
- (20) The evaluation is fully described with some rigour, but there are weaknesses in the method used (e.g., metrics used are not defined well enough, statistical significance ignored, only 1 version of the algorithm/configuration is reported).
- (30) The evaluation is fully described, and the method is rigorous with several algorithm configurations reported, evidence of incremental improvement and statistical significance of the results reported.
- (35) The evaluation is fully described, and the method is rigorous with several algorithm configurations reported, evidence of incremental improvement and statistical significance of the results reported. In addition, results are compared to the wider literature cited for extra context.

Conclusion (10)

- (0) There is no conclusion

(5) The conclusion summarizes the method and evaluation results, but does not describe any insights gained, or ideas for future improvement.

(10) The conclusion summarizes the method and evaluation results, and includes information on insights gained and ideas for future improvement.

Machine learning algorithm implementation (0)

The software implementation handed in will not score any marks.

The software implementation can be checked to provide evidence of practical work described in the final report and to make sure the reported evaluation of the F1 score is correctly calculated.

If any obvious mistakes in the code are spotted the Evaluation marks will have a penalty deduction of 5.

Any detected plagiarism will be reported to the Academic Integrity Officer.