COMP3208 Social Computing Techniques Indicative Marking Scheme (worth 40%)

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This coursework is submitted in teams of 2 or 3 students.

Mark split for teams – even split unless there is an explicit request for otherwise

Normally it is expected that individuals within a team contribute equally overall, even if the tasks may be different (e.g. implementation vs report writing). However, in the case that there is a clear discrepancy in overall effort, teams can choose to split the mark unevenly and so have different individual marks, as long as (1) the average mark for the team as a whole remains the same, (2) a non-failing mark cannot become a failing mark, (3) individual marks for the coursework do not exceed 100%, and (4) all team members agree on the mark split. A short motivating statement needs to be included. To request a non-equal mark distribution, students should send a single email to the module leader with the proposed split and CC all students in the team. This should be done within a week of the coursework submission deadline. The module leader retains the right to adjust or ignore the proposed split if it is deemed inappropriate.

Predicted ratings (15)

The final predicted ratings submission will be used to compute a MSE score. The MSE score of the final predicted ratings submission will be compared to the MSE score achieved by a number of hidden benchmark algorithms. The actual mark awarded will be based on where the MSE score falls within a distribution around this set of benchmark algorithm scores. Benchmark algorithm scores will not be shared.

Design and description of recommender system (10)

(8-10) The algorithm used is explained in sufficient detail to allow the results to be reproduced, including how to deal with the cold start problem. Pseudocode and equations are used and the decisions are well motivated. It is clear how the algorithm was optimised to allow for scalability. The recommender system described goes beyond the one discussed in class and adequate references are provided to motivate the decisions made. The report shows an excellent understanding. The report is well written, with no or few grammatical errors, and using the style of a research paper.

(7) The algorithm is described in detail using pseudocode and/or equations, including how the cold start problem is dealt with and scalability is achieved. Decisions are well motivated. The report is well written and shows a very good understanding of the algorithm used.

(6) There is a good description of the algorithm including how optimisation was achieved, but some details are missing.

(5) There is an adequate description of the algorithms but important details are missing and it does not go beyond the recommender system from the lecture.

(4) The algorithms used is described but this is very high level with no pseudocode and no motivation, and showing little understanding.

(0-3) The description of the algorithm is poor and unclear, and shows very little understanding. The report is poorly written and does not follow an adequate style.

Evaluation and discussion of recommender system (15)

(12-15) An excellent and thorough evaluation using several metrics and comparing several parameters and variants of the recommender system. The recommender system is evaluated against several benchmarks. The results are extensive with multiple tables and/or graphs comparing different approaches and finding optimal parameter settings. There is an excellent critical discussion of the recommender system and how it could be further improved, with several pointers to the literature.

(11) The report has a very good evaluation considering a couple of different parameters which are tuned to find the optimal values. Several simple benchmarks are used to compare the recommender system to. There are figures and/or tables with results. There is a good discussion of how the system could be improved with several pointers to the literature.

(9-10) The evaluation is good and focuses on one parameter, and there is comparison to simple benchmarks. Some possible improvements are mentioned and some references to the literature.

(8) There is some evaluation, but there is no thorough examination of the parameters, or a comprehensive evaluation on a large data set (only some anecdotal evidence on a few items). There is discussion of how the system can be improved but this is not supported by references.

(6-7) There is an evaluation but this is very limited with hardly any graphs or tables. There is some discussion of how to improve the results but no references cited.

(0-5) The evaluation does not meet the criteria: there is no comparison to simple benchmarks, no discussion and/or no references used.