

# Feedback on Exam performance for COMP24111

## Section A: MCQs

In the MCQ section A, a majority of students achieved satisfactory performance (average 7/10) while a number of students do not seem to have the basics that had been highlighted during lectures and tested in the given non-assessed exercises. For example, over 30% students still could not choose the correct answer to the assumption underlying the Naïve Bayes classifier even though they implemented this classifier in the Lab coursework and this was repeated very clearly in the revision lecture.

## Section B: Q1 and Q2

Many people seemed to mix up the concepts of false positive and false negative. This caused those people to lose 2 marks on the ROC analysis question (Q1a).

Several people wrote excessive amounts for Q1b, asking simply “State the learning rule for the perceptron”. The correct answer was simply the update equation:  $w = w + 0.1 * (t - o) * x$ , then to describe what the learning rate of 0.1 meant. Many people decided to write a 1 or 2 page essay, wasting a lot of their own exam time I suspect.

Many people could not formally define what a “bootstrap” sample was, or the difference between a filter and a wrapper.

## Section C: Q3 and Q4

Sect. C, students almost evenly chose either of them. Fortunately, all students made attempts and nearly all students could answer questions on book knowledge in C.3 and C.4 including those related to SVM and K-means. Nevertheless, it appears that there were only around 60% of students who could apply knowledge adequately for critical analysis. For example, a significant number of students could not even think of the cross-validation method, which was used in their Lab coursework, as a procedure in choosing a proper distance metric in the K-NN algorithm in C.4(c).

In summary, the overall performance as a class is consistent with that of cohorts taught with the same syllabus in past years.