

Assignment 3: Take Home Exam

31005 Advanced Data Analytics Spring 2018

This exam contributes 30% towards your final mark.

You have a week to do this exam. **Choose only *one* of the seven questions below to answer.** Your answer must be uploaded to Turnitin on UTSOnline by 11:59pm 12 Oct 2018.

Answers should be around 2-3 pages in length in 10 or 12 point single line spaced text (or equivalent). You may send the answer back as a PDF or plain text file.

The exam must be your own work. You may not discuss the questions with any other person. However, you may do any additional reading on the subject to answer the question, so long as any sources are cited using the Harvard referencing style (<http://www.lib.uts.edu.au/help/referencing/>). Indeed, it would **not** be enough to answer your question without doing some research. All of the writing in your answer (apart from short quotations) should be your own work.

The questions are difficult. They are all open research questions that would be good PhD topics. Don't worry that you cannot answer them fully. There may not be known answers. We are interested in your insights and thought processes. We want to see how you approach the problem and how well you reason an answer.

Other Information

No extensions will be granted for this exam. Late return of your answer will incur deduction of 20 percentage points from the total worth per day late or part thereof (Exemption: those who had been granted extension for this task when they got extension for Assignment 2). If your performance in an assessment item or items has been affected by extenuating or special circumstances beyond your control you may apply for Special Consideration. Information on how to apply can be found at <http://www.sau.uts.edu.au/assessment/consideration.html>. Marked answers will not be returned.

This assessment item supports objectives 1, 2 and 5 in the subject outline and Graduate Attributes B6 and E1.

Academic Standards: Please see the Subject Outline for additional details on the ethical standards we expect from you.

Hours: an average student should expect to spend 20 hours to get a 50P result.

Marking Scheme:

40% - quality of answer

- Relevance: answering the main point of the question? (1-15)
- Technical soundness: does the answer solves the problem, at lease in theory? (1-15)
- Feasibility: is the suggest solution practical? (1-10)

40% - quality of reasoning behind the answer

- Motivation: how do you arrive the answer, by drawing analogy to similar questions we have learned / by referring to existing research / by applying analysis of your own (1-20)
- Presentation: how the motivation / reasoning has been delivered, is the logic flowing and convincing? (1-10)
- Alternatives: Have alternative methods been considered and compared? (1-10)

20% - appropriateness of background research

- Related research area checked? (1-10)
- Appropriately cited and related to answer? (1-10)