Assessment 3 Question (Individual Task)

Instructions

Please also refer to the subject outline for more details about this task.

The due date and time are on Sunday, 30/04/2023, 23:59pm.

- This assessment is an individual task.
- Submissions will be made through UTS Canvas.
- Tutors will mark their student submissions and submit their results to the lecturer for validation.
- Marks will not be released until all assessments have been marked and validated – this is to ensure the same marking levels are maintained across studio sessions.
- Your tutor will distribute marks and feedback and address marking questions.
- All communications must use your UTS e-mail account – other e-mails may be ignored.

Assessment task 3: Solutions for a research problem

You have two ways to execute this assessment.

1) In this assessment, you are requested to offer a solution (or solutions) to a research problem. The research problem could be the one you have identified in assignment 2 or a new one that you feel more suitable for you now in this subject.
2) There are various solutions for a research problem
    a. select a research paper (or a few papers), and replicate all or parts of the experiments of the paper(s) to as evidence to confirm their claimed research achievements. In this case, you do need to take actions and invest time and energy to redo the solution part of the paper(s) in your own way.
    b. offer a new solution. In this case, you need to clearly demonstrate the advantages of your solution with evidence (theoretical, experimental, or both).

Requirement

1. Please include the UTS assignment cover page containing the student name, number and signature.
2. 1500-2000 words, reference is excluded.
3. Your report should include at least the following parts.
    a. A clear and sufficient description of the problem.
    b. A clear and detailed description of your solution – if it is from one existing paper, you need to re-explain it in your own words.
    c. Your settings for the experiments and/or theoretical modelling and analysis.
    d. The details of your experiments and/or theoretical modelling and analysis, such as parameter initialisation, devices you used, evaluation criteria for your problem, etc.
    e. The output of your work, e.g., diagrams, tables, algorithms, and findings.
    f. Compare your results to the state-of-the-art solutions from your surveyed current solutions – to demonstrate the advantages of your solution.
4. Your report should be in the format of a paper, including title, author, abstract, introduction, the sections from item 3 respectively, summary, and references.
5. The similarity of your report should not be higher than 30% (exclude the reference part).
6. Research tools are highly recommended, Latex for typesetting, Matlab for diagram (Microsoft Excel based diagrams are acceptable), and reference tools.

Marking Criteria

The assignment 3 is 25 marks in the final result, and we will mark it according to the weights assigned in the table below.

	comments
Description of existing major solutions of the problem (30%)	The breadth and depth of the solution space, and the disadvantages of the current solutions, which is the motivation of your work.
Your quality of your solution with evidence (40%)	The setting, details, correctness, and the output of your solution.
The organization, presentation logic of your report (20%)	Organize your material, and present in a connected logic for a smooth reading for the readers.
Writing and presentation (10%)	Readability of the report, integrity of the structure, and clearness of the presentation. Consistent style, clear tables and diagrams. Typos and language problems should be fixed by thorough proofreading.