CSIT940: Research Methodology (Spring 2024) Assignment-02 Task

Please include a copy of the assessment task where relevant (relevant here refers to cases where this task will be needed in order for the UOW Quality Assurer to be able to review the marks awarded) <</p>

Critical Literature Review on Your Research Topic

Assignment value: 20% of the subject assessment.

Marks available: 100 marks.

DIRECTIONS TO CANDIDATES

The purpose of this assignment is to develop fundamental skills required to conduct research, including searching papers from databases, analysing a research paper and drafting systematic literature reviews and referencing with proper typesetting tools.

In this assignment, you will write a short "Literature Review" (LR) on the topic that you have already selected (in Assignment #1).

[Note: This LR is "short" because you do not have a lot of time to do a *thorough* literature search, reading and full understanding. So, this should be considered a short *initial* LR.]

The general structure of a literature survey has been covered in the lectures. Your literature review must first briefly describe the broader general area, before zooming into the your chosen topic, which cannot be too general. Define the topic clearly and describe its importance (why do we want to study it). Read the papers to identify the different pockets and sub-pockets of research (themes). This survey must include *at least* 10 *papers* and must include research based on *at least two or three different* approaches. Then, identify some general conclusions based on the synthesis of literature that you have read; identify key research findings derived from PRIMARY research studies; specify the gaps in the research work and potential areas for future research (*you do not need to do the research yet*).

Basic Requirements:

- Must contain at least 10 papers in the report
- Must contain seminal papers and necessary milestone papers
- Must contain research works based on (at least) two or three different approaches
- Must contain both journal papers and conference papers
- Done in LaTeX (we will provide template)
- References and citation done in IEEE or Harvard format
- Do NOT copy chunks of text from the papers you read. Instead, use your own words.
- Similarity rate (from Turnitin): under 30% excluding the references.
- Penalty will apply if plagiarism is detected your mark can be zero or close to zero.

REMEMBER: The purpose of this subject is to develop your higher order skills – analysis, synthesis and evaluate and come up with creative ideas!

Some tips for you:

- Define your topic very clearly. It should not be too general.
- First, read each paper, and find their direction, proposed method and results
- Give sufficient description of the paper read (motivation, contribution, method, result, conclusion, techniques, etc)
- Highly recommended that you provide a comparison table on the main similarities and differences of the papers in the reference list (can be based on approach, assumption, etc)

Submission Requirement:

- 1. Deadline for submission is 17-April-2024, 6:00pm
- 2. Submit a pdf copy of the final literature review and the softcopy LaTeX source documents (tex, bib, etc).
- 3. Your Literature Review must include *at least* the following headings:
 - a) Introduction

Describe the topic clearly. Show the importance of the topic.

b) Literature Review

Decide how you want to classify the past literature – whether by methods, by time (chronological), etc. Then describe the related works accordingly. Describe the significance/contribution of each paper and their limitations (i.e., critical review). Do not just rely on what your opinion/beliefs, instead you MUST use the facts (i.e. as written in the papers).

c) Discussion and Conclusion

Give a general overview of current state of research progress in the topic, and point out issues that are still unresolved and directions for future research.

d) **Bibliography** (*NOT* annotated)

Reference list done in IEEE or Harvard format.

4. Bonus points are given for good explanation or insights to existing methods, or to new creative method proposed to solvex the problem or gaps in the research.

Finally, start planning your work for Assignment #2 immediately.

Remember: If you fail to plan, then you plan to fail!