## **Instruction for Submission of Technical Report, CS 4310 (Spring 2018)**

**Final Reports:** The final reports should be comprehensive and a single pdf file should be emailed to me at <a href="mailto:fahad.saeed@wmich.edu">fahad.saeed@wmich.edu</a> before the final exam week. The deadline for submission is Sunday April 22<sup>nd</sup> 5pm. The reports (11pt font, Times Roman, 10 pages maximum excluding cited references and code) must contain at least the following sections:

- 1) **Abstract:** A very condensed summary of the target problem, the algorithm and implementation and results. This will give the reader the general overview of what you have done in your project.
- 2) Introduction and Target Problem: A detailed description of problem that you tried to solve. Make sure that the problem description is detailed enough (with all its dimensions) so that a layman person can read this section and have an idea what problem you are talking about. Concatenate your problem statement with examples to illustrate your point.
- 3) **Intellectual Merit:** A description of the algorithm associated with the targeted research problem that you implemented. Give examples to show how the algorithms works, the time- and space-complexity of the algorithm and other details that might be relevant to the algorithm.
- 4) **Implementation:** Give details about how you implemented the algorithm, and any special data-structures or techniques you used to come up with for an efficient implementation. Discuss why your implemented algorithm should give you experimental results that are close to the theoretical analysis in the previous section.
- 5) **Performance Evaluation:** Discuss how you went about to do the experimental evaluation of your implemented algorithm. Discuss all the data sets that you used and the rationale for using those data sets. Also discuss any other ideas that you might have that could have improved your experimental evaluation. Also present all of the results as part of your experiments that you might have documented.
- 6) **Broader Impacts:** What broader impact does your research activity has on the human civilization. This can include anything that improve the human condition, knowledge or ability.
- 7) **Proposed Improvement in the algorithm:** Provide any details on how you would go about and improve the given algorithm. Give your rationale of why this would work.
- 8) Discussion and Conclusions
- 9) Cited References
- 10) Code that you wrote

You can access a paper (below) that you can use as your guide to writing your technical report:

https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1013&context=pcds\_reports