CptS 475/575: Data Science
Fall 2019

Class Project: Final Report Writing Guidelines

Due date: December 12, 1pm. Submission via OSBLE. File format: PDF.

General comments: Recall that a rubric outlining what a report is expected to contain was provided in the Project Description document posted earlier in the semester. Below are some guidelines to help you further in writing your report. The exact nature and organization of your report will of course depend on the project you undertook, and so you should consider these only as general guidelines. A typical report is expected to be somewhere between 10 to 15 pages long, using single-column 12 point font size. (If you have many figures/graphics to include in your report, you are welcome to use more than 15 pages.) In the list below, the allocations in parenthesis on the various items roughly indicate the percentage points each of them carries.

Codes and other supplementary material are to be submitted as a separate appendix to the report. For codes specifically, you will make the code available somewhere on the web (e.g. github) and provide a link to the location in the appendix.

1. **Abstract** (7 pts)

   Write a few sentences (about five) summarizing what the project is about and its major findings.

2. **Introduction** (10 pts)

   Motivate and abstractly describe what you are trying to solve/achieve and your basic approach. In particular, try answer the following questions: What is the problem? Why is it important? What is your basic approach? Very briefly discuss how the work fits into related work in the area. Summarize the basic results and conclusions you will present.

3. **Problem Definition** (7 pts)

   Precisely define the problem(s) you are addressing and/or the questions you are exploring. Elaborate on why these are interesting and important.

4. **Models/Algorithms/Measures** (10 pts)

   Describe briefly the model(s), measure(s), or algorithm(s) you are using (or developing) to investigate/address the problem. Try to give a concrete example, if appropriate.

5. **Implementation/Analysis** (23 pts)

   Here is where you give a detailed description of your work. Questions worth answering include: What dataset are you analyzing? What data are using to evaluate your method? What specific hypotheses are you testing? What experimental setup are you using? What external evaluation criteria are using to test your hypotheses? What other methods are you comparing against?

6. **Results and Discussion** (22 pts)

   Present the quantitative results of your experiments; as you well know graphical data presentations such as plots and histograms are usually better than tables.
   Discuss your results. What do the results reveal? Is your hypothesis supported? What conclusions do the results support? What can be said about the strengths and weaknesses of your approach?

7. **Related Work** (7 pts)

   Discuss related work (if any) that address the same or similar problem. State how your problem/approach is different.

8. **Conclusion** (7 pts)

   Briefly summarize the important results and conclusions presented in the report. Mention how the work might be extended in the future.

9. **Bibliography** (7 pts)

   Be sure to include a standard, well-formatted, complete bibliography of work you have interacted with in your text or used in your work.