Final Project Write-up

CS 595: Data-Intensive Computing

http://www.cs.iit.edu/~iraicu/teaching/CS595-F11/index.html

Assigned: 11-23-2011

Due: 11:59 PM 12-02-2011

Overview

A major component of your grade will be based on your semester-long project, which you have chosen. Your final report will be an extension to your initial proposal and progress report that you wrote early in the semester. You should use font 10 (Times New Roman, Arial, or Calibri), dual column format, single spaced (with 6 pt space between paragraphs), and have normal margins of 1" on all corners. You can use this ACM template as a starting point (http://www.acm.org/sigs/publications/pubform.doc), but change the margins to 1" and the font size to 10; for more templates, see http://www.acm.org/sigs/publications/proceedings-templates. In the end, your reports should look something like this, from a formatting perspective: http://www.cs.iit.edu/~iraicu/research/publications/2011_LSAP2011_exascale-storage.pdf. Some of you have already used such templates for your reports, and you do not need to change the template to the ACM one, as long as you have the right font type, size, columns, spacing, and margins.

Your final report should include the following information:

- Title
- People involved (in case it is a group project)
- Abstract (150 ~ 300 words)
- Section 1: Introduction and motivation (1 ~ 2 pages)
- Section 2: Background information necessary to make the report self contained (0.5~2 pages)
- Section 3: Proposed solution (1~3 pages)
    - clearly state the nature of the project (e.g. implementation of a real system, simulation, theoretical, empirical performance evaluation, survey, etc)
    - be specific about what techniques you plan to use, what existing software and systems you will use, etc
- Section 4: Evaluation (1~5 pages)
    - Be specific with the evaluation methodology, metrics measured, and variables you explored
    - Since all of your projects had some systems component to them, where you built some system, or at least you analyzed some existing system, I expect you to have a significant performance evaluation section, with empirical results!
    - I don't want to see lots of graphs/tables, without clear explanation on what the experiment was, why did you do it, what were the variables that you fixed and what were the variables that you varied, metrics used (make sure you defined them somewhere), and what did you learn from the experiments; in the end, I don't want raw data, I want interpreted and well thought out results
- Section 5: Related work (~1 page)
    - What others have done that is similar to what you are proposing
    - Be specific in what is different in your work from that which has been proposed previously
- Section 6: Conclusion (1 page)
    - What have you learned?
    - How have you evaluated that your project was a success?
    - What future work would you do, if you were to pursue this further?
    - For those of you doing a group project, make sure to clearly state each person's contribution
- Section 7: References (at least 10 references, but I expect more like 20~30 references)
    - Use as many formal references as possible, and only use online material (e.g. a web site, wikipedia entry, etc) when absolutely necessary
- Appendix: Optional
    - Any material and/or results you have written that didn't quite fit in the above sections; it is likely I will not read this section, unless I am looking to better understand some part of your project

Using the guidelines above, you are likely going to have a final report that will range between 7 pages to 15 pages long. I doubt you can fit all of the required information in anything less than 5 pages, and I don't want to see a report that is longer than 20 pages. If you want to meet with me anytime between now and when this report is due, feel free to setup an appointment via email.