Related Work/Background Section

Due dates: Wednesday, December 3, in-class

Assignment

Your largest writing assignment in the course is the preparation of the Related Work and/or Background section(s) of your M.S. thesis.

What to write

You can elect to write one of three different versions: a pure Related Work section, a pure Background section, or a combination Background/Related work section.

Some guidelines on what to choose:

- Choose to write the Related Work section if:
  - You know the subject matter of your thesis well;
  - You have started the work on your thesis;
  - There is a significant amount of research relevant to your thesis;
  - The subject matter of your thesis is relatively easy to understand for most computer scientists. (That is, the background information needed to understand your thesis research as well as relevant work by others is relatively benign. Note, that this is a judgement call on your part! Consult the instructor if/when in doubt).

- Choose to write the Background section if:
  - You have not selected the final thesis topic, or
  - You have not started significant work on your thesis topic, or
  - There is no significant relevant work "parallel" to your thesis research, but the topic you are studying requires an introduction.
Choose to write the combo Background and Related Work section if:
  
  – Your thesis topic requires a significant technical introduction to make your work, and related work be understandable to most computer scientists out of your immediate area of specialization.
  
  – The amount of related work available to you is relatively small, and will not be sufficient for a full-blown related work section.

Your Related Work/Background section must be accompanied by the Bibliography containing all relevant work cited in your document.

How much to write

As opposed to the other two writing assignments, the length of your Background/Related Work document should be commensurate with the length of your expected (or putative) M.S. thesis. Your work will be judged on the following criteria:

1. **Clarity.** Your ability to explain the concepts and the content of the work in a way that make it understandable to a professional with general computer science background, but with no special background in your thesis research area.

2. **Completeness.** The coverage of both the underlying (for Background) and related (for Related Work) material presented in your submission. You are expected to present a fair overview of the work surrounding your own research, *without omitting any important material.*

3. **Narrative.** While clarity addresses your ability to make individual points, narrative addresses your ability to construct a cohesive story within your document.

4. **Format.** This addresses whether you selected the right format, of the three presented above (pure Related Work, pure Background or Background and Related Work) for your document.

5. **Bibliography and Citations.** The quality of your bibliography in terms of completeness of individual references and the appropriate use of citations in the document.

Timeline and Deliverables

The assignment has only one deliverable, due **March 9**, the last class.
**Deliverables.** Submit your document via the course GitHub wiki.

I encourage use of LaTeX for this assignment, as it makes it easy to keep track of bibliography and citations.

You can choose to submit your related work section as a separate PDF document. Alternatively, you can combine all your thesis-related writings, introduction, validation plan (Assignment 5) and related work section into a single document. If you do the latter, please use the thesis Latex templates and make the text each of the three assignments a separate, clearly and appropriately named chapter.