Guidelines for Formulation of Research Questions

Due: Feb. 23 (beginning of class)

In this phase of the coursework for CSci 8001–802, you will identify a set of two to three research questions based on your readings for the literature review. These research questions will be the basis of the full proposal that you will write subsequently, where you will develop a research plan to address these questions. (Guidelines for the full proposal will be provided at a later date.)

The questions that you formulate should be interesting and show at least some promise of leading to useful research down the road. You are not expected to conduct such research in this course per se; instead use this as an opportunity to get a headstart on your Ph.D. research.

Gauging what constitutes an interesting and promising research question can be difficult and the criteria can vary from area to area. As general rules of thumb, ask yourself why the question is important, what resolving the question might mean for the area, and whether there are any plausible initial approaches to the question. If you need help getting started on framing your research questions, please talk to me or, better still, talk to your advisor or prospective advisor as s/he will be in a better position to provide feedback on your specific topic.

For each research question, you should provide a statement of the question, why it is important, what it would mean to resolve the question, and outline briefly any initial thoughts on possible approaches. (You will get a chance to elaborate on approaches in more detail in the full proposal phase.) Also, provide context for the question in terms of how it relates to prior work (you can be brief here and reference your literature review). Finally, if appropriate, include a short concluding paragraph on how your questions relate to one another.

Deliverable: Please submit a typed, stapled hardcopy of your questions (1-inch margins, 11- or 12-point font, single-spaced, single-column). Include a separate cover page, with your name, student ID#, and advisor name (if known). Proofread your document.

Page limit: 3 pages, excluding the cover page and any references that you cite.

Have fun!