Comments on Reaction Papers

The reaction papers were well done overall. As discussed on the previous handout, the grading was done on a ✓ / ✓− / ✓+ scale. However, it turned out to be useful to assign two separate grades to each paper using this scale. The first, labeled **P**, is based on the discussion of the selected papers themselves; the second, labeled **E**, is based on the extensions of the discussion beyond the direct content of the papers. (Clearly there's not a simple dividing line between these two categories, since any extended critique of the papers tends to blend into such extensions; this is something I aimed to take into account.)

I've tried to write reasonably detailed comments on specific points raised in the individual papers, but also wanted to gather some comments that apply to the papers more generally.

- One phenomenon that came up in a number of the reaction papers was a tendency to stop short of fully exploring a potentially interesting point. Often, a paper would say, "It would be interesting to extend this work to handle ..." but then leave the discussion at that. Such cues are precisely the points where you have the potential to develop an idea in more detail: How would you suggest specifically that the work be extended? (I.e. can you propose a concrete experiment, or formulate a concrete model or algorithm?) What do you speculate might happen if this extension were pursued?

  Similarly, if you find yourself writing something like, "... was a weakness of the paper," try to avoid stopping there. How might this weakness be fixed? Again, it's good to try proposing something specific. In all these cases, it's not necessary to fully *answer* the questions you raise; but you should at least include some specific discussion about how someone might go about trying to answer them.

  By way of example, some of the reaction papers proposed novel problems and gave algorithms for them, or tried out small-scale experiments by issuing queries to search engines. These are nice ways of developing an idea, when you see a way to do it.

- Almost everyone handled the choice of papers well. A few issues to watch for:
  - For papers not linked from the course home page, you should say where you found them. Ideally, this should be a citation to a conference or journal; but if you don't know of such a citation, you should at least give the URL where you found it.
  - You should make sure that the papers you choose are reasonably well related, so that you can construct a single discussion that involves all of them. This tends to flow better than a reaction paper with a separate section corresponding to each paper.
  - After choosing a paper not linked from the course home page, make sure that you also devote a reasonable amount of the discussion to it.
  - Some people chose a set of papers that all appeared on the course home page. So to re-iterate: at least one of the papers should not be from the home page.

Tentative Schedule for Remaining Coursework

The plan is to have two further reaction papers in the style of the first, followed by a project proposal and then the project itself.

Reaction Papers 2 and 3. So that you can begin thinking more broadly about project topics, Reaction Papers 2 and 3 can be based on anything from the course home page, not restricted to the current section of the course. The due dates will be

Reaction Paper 2: due Friday, October 11
Reaction Paper 3: due Wednesday, October 30

Project Proposal (and Project). Due to the size of the class, I'm allowing projects to be done in groups of up to 4 (rather than 3, as the course home page originally said).

The first part of the project will be a project proposal, which will be **due Monday, November 11.** This can be written in the same format as the reaction papers, except that it can be a single paper written by the full group (of up to 4), and it should contain at least five references (including at least one not on the course home page). The project proposal should describe the issue that is going to be addressed, the existing work on this issue (as contained in the references), and specific suggestions for the new work that is going to be tried out in the project itself. Specific suggestions can include proposed experiments, a novel problem formulation or measurement, or a novel algorithm.

The final project write-up will be **due Monday, December 16**, according to the format described on the course home page.