The idea of response paper is to go into more in depth in one topic and review several current research papers in this area. You should be understanding the strengths of each, and likewise where there is room for improvement and perhaps also contrast different approaches used in the different studies. You should be thinking beyond what you just read, and not just take other peoples work for granted or assume that, just because the work is published, that it is completely correct.

Consequently, your reaction paper should cover a few (two or preferable three) research papers. Your writeup should be about 2-3 pages. The organization should be roughly as follows. About one page should be used to summarize the main content and results of the papers you are discussing. How do they fit in the field, and what you have learned in class so far? What is the connection between the papers you are discussing? About one page should be a judgment of what is in the papers. What struck you as particularly interesting? What were the authors missing? Was anything particularly unrealistic? This section should go into a bit of depth. A statement like "This was a nice paper, or "I didnt like this paper by itself is not enough. About one page should be a discussion of what you feel may be an interesting step to take beyond what the papers are doing. Perhaps you have an idea of a better model for something? A better algorithm? Or their papers suggest techniques that you would like to apply elsewhere? Obviously, your ideas here may not be completely worked out.

You have your choice of topic and papers. Suggested ones are listed on the next page. You should choose papers that tie in with your class project. The writeup you create for this homework assignment might serve as as the literature review for your final class project.
Community structure in networks


Food networks/Foodwebs


- Fill in your own choice of paper here if you choose this topic.

Road networks


- Perhaps find a reference for using GIS data to understand networks.

Power grid


**WWW and WWW search**


• TH Haveliwala, “Topic-sensitive pagerank: A context-sensitive ranking algorithm for web search”, IEEE Transactions on Knowledge and Data Engineering, 2003

**Decentralized search**


**P2P architectures**


FKP/Optimization/Network Growth


- A. Fabrikant, E. Koutsoupias, C. Papadimitriou, “Heuristically optimized Tradeoffs: a new paradigm for power laws in the internet”, In: Proceedings of the 29th International Colloquium on Automata, Languages and Programming (2002). Interesting model proposed, but note the conclusions about the degree distribution being a power law are incorrect. The proof of the real distribution is in the technical paper listed next:


Software networks


Interacting networks
