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1. Briefly summarize each article in a short paragraph. Use your own words; do not cut and paste the abstract/summary.
2. For each article, write down a comment or question that it brought to your mind.
3. For each article, identify at least one thing the authors could have done/discussed that would improve the quality of their work.

### **Local Community Structure In Networks**

1. This article talks about how local communities/clusters can be found in a graph, even without full knowledge of all the vertices and edges in the graph. An example this paper gives is [www.amazon.com](http://www.amazon.com). Basically Amazon is a huge network of edges and vertices and this paper argues that it is possible to discover local communities of vertices (items), even without exploring the whole graph. This is useful because it is infeasible to fully explore some things (like the web).
2. A comment that came to my mind was what else could this algorithm be used on? It seems that there could potentially be a whole class of problems that this algorithm could solve and I wonder what those types of problems would include. It seems this algorithm would do well with all type of product producing/consuming sites, but I wonder what else it could be good at.
3. I think that the author could have improved the quality of his work by discussing more concrete examples of how this discovery could be applied to other real life problems. He did a good job with his example of Amazon, but I think that another concrete example would have strengthened this paper. Discoveries like this that can be used to . Another example or two would have helped, in my opinion.

## **Discovering Social Circles in Directed Graphs**

1. This article discusses how using portions of a directed graph social circles can be discovered. Specifically, this paper talks about the problems that the algorithm faces, how it handles them, and some possible real life examples. The paper also talks about different types of searching algorithms and the differences between them.
2. This article brought a question to my mind of what was the main purpose for researching this topic. Usually, I believe, research takes place when a problem needs to be solved or additional information learned. I was wondering what caused this to be a topic of research, or what was the original problem/idea that led to this research.
3. Like the previous article I think additional concrete examples of future applications would be useful. Beside social media are there other specific problems/instances that could be solved with this type of algorithm/discovery? If the authors had thought of any other types of applications it would have been nice to hear mention of them in the paper.