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CS478

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Reading

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

Finding local community structure in networks

* The article talks about a need for community discovering algorithms that can operate on graphs in which the entirety of the graph is for some reason unknown. The article suggests a greedy algorithm that expands a graph from a start node according to a local modularity measure. This measure is simple a measure based on the number of connected nodes, boundary nodes, and unexplored nodes. It shows this algorithm works well compared to its neighboring algorithms, of which operate with full knowledge of the graph.
* I wanted to know how this affects or relates to ideas about clustering.
* I would have liked to see a simple table listing some competing algorithms and this algorithm with comparisons on time and accuracy with respect to finding these local communities. Over all, I have not a clue, there is a high barrier to introduction here.

Discovering Social Circles in Directed Graphs

* This article proposes a social circle algorithm that strives to take into account directed graphs. It focuses on starting with a particular set of nodes and expanding those nodes one at a time by picking a degree-inspired quality function. It strives to show that the algorithm performs well in benchmark test and in real life case studies.
* Where is it important to focus on the directedness of a graph, versus, ignoring it and just looking at connections?
* I wish the article could have been shorter, could things have been stated more simply, more concisely? I had to start skimming it. It would also be interesting to know what insight this directed algorithm brought to a data set versus that of a non-directed algorithm.