Abstract

A strongly connected component (SCC) of a digraph is a maximal set of vertices such that every vertex is reachable from every other vertex. This topic is very interesting because of the way the algorithm can be used in various applications of network and communications. The Strongly Connected Components Detection (SCCD) algorithm can be a powerful tool in social networking service that is a platform to construct social networks or social relations forming communities, among people who offer similar interests, activities, establishments or genuine associations. SNS can study the evolution of those communities and getting to know what community a person belongs to, may help him, getting better ads targeting their essentials. In this work, we propose to apply SCC Detection algorithm to the Social Network Graph (or SNG) to identify smaller groups of nodes related to each other by some specific criteria (Sports, Health, Technology, Religion, etc). We discuss some findings observed from the application of this algorithm to the SNG.
3. Kurt Mehlhorn, Stefan Naher and Peter Sanders, Engineering DFS based Graph Algorithms, Partially supported by DFG grant SA 933/3-1, 2007.
5. Marije de Heus, Towards a Library of Parallel Graph Algorithm in Java, 14th Twenty Student conference on IT January 21st 2011.

Index Terms

Computer Science
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Keywords

Social Networking Site, Social Network Graph, Strongly Connected Component Detection Algorithm, Depth First Search Algorithm, Tarjan's Algorithm, Cheriyan-Mehlhorn-Gabow Algorithms, Kosaraju's algorithm.