First, I studied the paper with the title 'Modeling Epidemic Information Dissemination on Mobile Devices with Finite Buffers' [1]. In this paper, the author presented a modeling approach for steady-state analysis of epidemic dissemination of information in mobile ad hoc networks. It described the strategies for the spread of multiple data items with the limitation of finite buffer capacity at mobile devices. The paper analyzed seven degree of separation (7DS) for implementing p2p data sharing in a MANET using epidemic dissemination of information, and then extended the approach with a buffer management scheme like least recently used (LRU). The paper is contributive on presenting a solution to implement the epidemic information dissemination in mobile ad hoc networks, which holds finite buffer capacity. To better comprehend the meaning of the approach in this paper, I need to study more papers on 7DS to learn about the background.

Second, there is another paper studied, named 'efficient search in peer-to-peer networks' [2]. This paper focuses on the technologies on query and search in kinds of p2p systems. And it also provided systemic and comprehensive analysis on the design of the technologies, including iterative deepening, directed BFS technique and local indices technique. Besides, the evaluation of the techniques is evaluated based on the experiments and analysis in the paper. The techniques in the paper are mainly designed for file sharing systems; nevertheless, it may be incentive for us to transfer the techniques to other systems, such as social network, for example.

Reference

[1] Christoph Lindemann, Oliver P. Waldhorst, Modeling Epidemic Information Dissemination on Mobile Devices with Finite Buffers. In proceeding of SIGMETRICS , 2005,.

[2] Beverly Yang, hector Garcia-Molina, Efficient Search in Peer-to-peer networks, In the Proceeding of 22nd IEEE International Conference on Distributed Computing Systems (ICDCS), July, 2005.