Abstract

A mobile social network plays an important role as the spread of information and influence in the form of "word-of-mouth". It is basic thing to find small set of influential people in a mobile social network such that targeting them initially. It will increase the spread of the influence. The problem of finding the most influential nodes in network is NP-hard. It has been shown that a Greedy algorithm with provable approximation guarantees can give good approximation. Community based Greedy algorithm is used for mining top-K influential nodes. It has two components: dividing the mobile social network into several communities by taking into account information diffusion and selecting communities to find influential nodes by a dynamic programming. Location Based community Greedy algorithm is used to find the influence node based on Location and consider the influence propagation within Particular area. Experiments result on real large-scale mobile social networks show that the proposed location based greedy algorithm has higher efficiency than previous community greedy algorithm.

References

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Index Terms

Computer Science

Algorithms

Keywords

CGA - Community-based Greedy Algorithm
LCGA – Location Based Community Greedy Algorithm