

Searching Optimal Bus-routes based on Frequent Subgraph Mining

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Abstract

This paper proposed an approach of searching the optimal bus-routes based on data mining technology called Frequent Subgraph Mining (FSM). FSM is an important task for exploratory data analysis on graph data. Many approaches handling graph data assume that the data structure of the mining task is small enough to fit in the main memory of a computer. However, as the real-world graph data grows, both in size and quantity, such an assumption does not hold any longer. To overcome this problem, the proposed system use MapReduce framework which is becoming the de-facto paradigm for computation on massive data. In this paper, it has three main phases: partition, preparation and mining. The mining phase use MapReduce paradigm. The proposed system demonstrates the searching of optimal routes, which means the minimum bus-stops, in Yangon region. It can help the travelers in finding the bus-stops and routes during their visit in Yangon.