Abstract

Graph partitioning is a traditional problem with many applications and a number of high quality algorithms have been developed. Graph partitioning by multilevel scheme is more popular, which includes three phases coarsening, initial partitioning and uncoarsening. In this paper a road network graph is partitioned into two parts, with the aim of reducing the cut size. In road network graph, the nodes or vertices are road junctions, endpoint, etc. and the edges are the path or road length. Recently multilevel hybrid graph partitioning algorithm was proposed using local search refinement strategy and balanced big method for initial partition. In this paper simulated annealing is used to improve the quality of partition and has given better results.

References


Enhanced Multilevel Hybrid Algorithm for Graph Partitioning

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Index Terms

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Keywords

coarsening road network graph initial partition refinement uncoarsening simulated annealing.