Abstract

A vertex cover is a subset of the vertex set of a given graph $G$ such that every edge in $G$ has at least one endpoint in this set. The Minimum Vertex Cover problem consists to find the minimum sized vertex cover in a graph. This problem which belongs to the class of NP-hard graph theoretical problems, has many practical applications in various fields. In this article, we propose a novel heuristic algorithm for solving this problem. The test results obtained on some graph examples available in the literature confirm the effectiveness of the proposed method.
A Heuristic Approach for the Vertex Cover Problem


Index Terms

Computer Science

Keywords
Minimum Vertex Cover problem

heuristic algorithm

Applied Mathematics