A new Steiner tree algorithm based on Sollin’s algorithm in graphs

ABSTRACT
The minimum Steiner tree problem, a classical combinatorial optimization problem with a long history, is a NP-complete problem. Due to its wide application, study of heuristic algorithm about Steiner tree problem has important practical and theoretical significance. In this paper, we introduce a new heuristic algorithm based on Sollin’s algorithm for solving the Steiner tree problem in graph. We describe our algorithm and its computational results. It is shown that our algorithm has a good performance in achieving a Steiner tree and is comparable with other existing solutions.

INDEX TERMS
Index Terms are available to subscribers and IEEE members.

Additional Details
- On page(s): 489
- Conference Location: Zhangjiajie, China
- Print ISBN: 978-1-4673-0088-9
- Digital Object Identifier: 10.1109/CSAE.2012.6272820
- Date of Current Version: 20 August 2012
- Issue Date: 25-27 May 2012