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

This paper appears in:
Computer Science and Automation Engineering (CSAE), 2012 IEEE International Conference on
Date of Conference: 25-27 May 2012
Author(s): Pashaei, Elnaz
Faculty of Computer & Informatics, Istanbul Technical University, Istanbul, Turkey
Nourollah, Ali ; Meybodi, Mohammad Reza
Volume: 2
Page(s): 489 - 493
Product Type: Conference Publications

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