



Deterministic Global Optimization: Geometric Branch-and-bound Methods and their Applications

By Daniel Scholz

Springer-Verlag New York Inc., United States, 2014. Paperback. Book Condition: New. 2012 ed.. 235 x 155 mm. Language: English . Brand New Book ***** Print on Demand *****. This monograph deals with a general class of solution approaches in deterministic global optimization, namely the geometric branch-and-bound methods which are popular algorithms, for instance, in Lipschitzian optimization, d.c. programming, and interval analysis. It also introduces a new concept for the rate of convergence and analyzes several bounding operations reported in the literature, from the theoretical as well as from the empirical point of view. Furthermore, extensions of the prototype algorithm for multicriteria global optimization problems as well as mixed combinatorial optimization problems are considered. Numerical examples based on facility location problems support the theory. Applications of geometric branch-and-bound methods, namely the circle detection problem in image processing, the integrated scheduling and location makespan problem, and the median line location problem in the three-dimensional space are also presented. The book is intended for both researchers and students in the areas of mathematics, operations research, engineering, and computer science.



Reviews

An exceptional ebook along with the typeface employed was intriguing to see. It really is simplistic but surprises within the fifty percent of the ebook. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Brian Miller

Merely no words to spell out. I am quite late in start reading this one, but better then never. I am happy to explain how this is actually the very best publication we have go through within my personal daily life and can be he best ebook for at any time.

-- Althea Christiansen