



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

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

This book might be really worth a read, and superior to other. This really is for all who statte there had not been a really worth studying. I am just happy to tell you that this is basically the very best pdf i actually have read through during my very own lifestyle and may be he best ebook for actually. -- Elnora Ruecker

Extremely helpful to all type of folks. It is among the most awesome pdf i actually have study. I found out this pdf from my dad and i recommended this pdf to discover. -- Dayana Turner