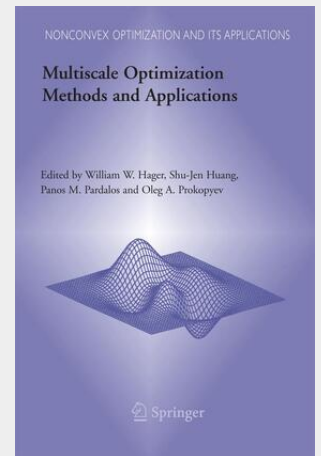Hager / Prokopyev / Huang

Multiscale Optimization Methods and Applications

As optimization researchers tackle larger and larger problems, scale interactions play an increasingly important role. One general strategy for dealing with a large or difficult problem is to partition it into smaller ones, which are hopefully much easier to solve, and then work backwards towards the solution of original problem, using a solution from a previous level as a starting guess at the next level. This volume contains 22 chapters highlighting some recent research. The topics of the chapters selected for this volume are focused on the development of new solution methodologies, including general multilevel solution techniques, for tackling difficult, large-scale optimization problems that arise in science and industry. Applications presented in the book include but are not limited to the circuit placement problem in VLSI design, a wireless sensor location problem, optimal dosages in the treatment of cancer by radiation therapy, and facility location.

As optimization researchers tackle larger and larger problems, scale interactions play an increasingly important role. One general strategy for dealing with a large or difficult problem is to partition it into smaller ones, which are hopefully much easier to solve, and then work backwards towards the solution of original problem, using a solution from a previous level as a starting guess at the next level. This volume contains 22 chapters highlighting some recent research. The topics of the chapters selected for this volume are focused on the development of new solution methodologies, including general multilevel solution techniques, for tackling difficult, large-scale optimization problems that arise in science and industry. Applications presented in the book include but are not limited to the circuit placement problem in VLSI design, a wireless sensor location problem, optimal dosages in the treatment of cancer by radiation therapy, and facility location. Audience: Multiscale Optimization Methods and Applications is intended for graduate students and researchers in optimization, computer science, and engineering.

106,99 €
99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781489991843
Medium: Buch
ISBN: 978-1-4899-9184-3
Verlag: Springer US
Erscheinungstermin: 19.11.2014
Sprache(n): Englisch
Auflage: 2006
Serie: Nonconvex Optimization and Its Applications
Produktform: Kartoniert
Gewicht: 645 g
Seiten: 407
Format (B x H): 155 x 235 mm