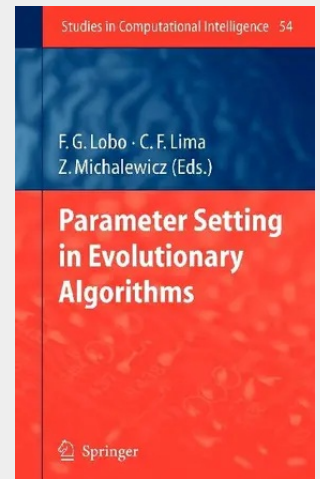


Parameter Setting in Evolutionary Algorithms

One of the main difficulties of applying an evolutionary algorithm (or, as a matter of fact, any heuristic method) to a given problem is to decide on an appropriate set of parameter values. Typically these are specified before the algorithm is run and include population size, selection rate, operator probabilities, not to mention the representation and the operators themselves. This book gives the reader a solid perspective on the different approaches that have been proposed to automate control of these parameters as well as understanding their interactions. The book covers a broad area of evolutionary computation, including genetic algorithms, evolution strategies, genetic programming, estimation of distribution algorithms, and also discusses the issues of specific parameters used in parallel implementations, multi-objective evolutionary algorithms, and practical consideration for real-world applications. It is a recommended read for researchers and practitioners of evolutionary computation and heuristic methods.

One of the main difficulties of applying an evolutionary algorithm (or, as a matter of fact, any heuristic method) to a given problem is to decide on an appropriate set of parameter values. Typically these are specified before the algorithm is run and include population size, selection rate, operator probabilities, not to mention the representation and the operators themselves. This book gives the reader a solid perspective on the different approaches that have been proposed to automate control of these parameters as well as understanding their interactions. The book covers a broad area of evolutionary computation, including genetic algorithms, evolution strategies, genetic programming, estimation of distribution algorithms, and also discusses the issues of specific parameters used in parallel implementations, multi-objective evolutionary algorithms, and practical consideration for real-world applications. It is a recommended read for researchers and practitioners of evolutionary computation and heuristic methods.



213,99 €

199,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783540694311

Medium: Buch

ISBN: 978-3-540-69431-1

Verlag: Springer

Erscheinungstermin: 16.03.2007

Sprache(n): Englisch

Auflage: 1. Auflage 2007

Serie: Studies in Computational Intelligence

Produktform: Gebunden

Gewicht: 664 g

Seiten: 318

Format (B x H): 160 x 241 mm

