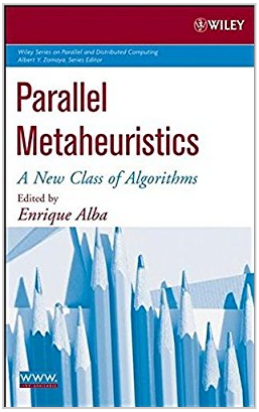

Parallel Metaheuristics: A New Class of Algorithms

By Enrique Alba

Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba

Solving complex optimization problems with parallel metaheuristics

Parallel Metaheuristics brings together an international group of experts in parallelism and metaheuristics to provide a much-needed synthesis of these two fields. Readers discover how metaheuristic techniques can provide useful and practical solutions for a wide range of problems and application domains, with an emphasis on the fields of telecommunications and bioinformatics. This volume fills a long-existing gap, allowing researchers and practitioners to develop efficient metaheuristic algorithms to find solutions.

The book is divided into three parts:
* Part One: Introduction to Metaheuristics and Parallelism, including an Introduction to Metaheuristic Techniques, Measuring the Performance of Parallel Metaheuristics, New Technologies in Parallelism, and a head-to-head discussion on Metaheuristics and Parallelism
* Part Two: Parallel Metaheuristic Models, including Parallel Genetic Algorithms, Parallel Genetic Programming, Parallel Evolution Strategies, Parallel Ant Colony Algorithms, Parallel Estimation of Distribution Algorithms, Parallel Scatter Search, Parallel Variable Neighborhood Search, Parallel Simulated Annealing, Parallel Tabu Search, Parallel GRASP, Parallel Hybrid Metaheuristics, Parallel Multi-Objective Optimization, and Parallel Heterogeneous Metaheuristics
* Part Three: Theory and Applications, including Theory of Parallel Genetic Algorithms, Parallel Metaheuristics Applications, Parallel Metaheuristics in Telecommunications, and a final chapter on Bioinformatics and Parallel Metaheuristics

Each self-contained chapter begins with clear overviews and introductions that bring the reader up to speed, describes basic techniques, and ends with a reference list for further study. Packed with numerous tables and figures to illustrate the complex theory and processes, this comprehensive volume also includes numerous practical real-world optimization problems and their solutions.

This is essential reading for students and researchers in computer science, mathematics, and engineering who deal with parallelism, metaheuristics, and optimization in general.

Parallel Metaheuristics: A New Class of Algorithms

By Enrique Alba

Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba

Solving complex optimization problems with parallel metaheuristics

Parallel Metaheuristics brings together an international group of experts in parallelism and metaheuristics to provide a much-needed synthesis of these two fields. Readers discover how metaheuristic techniques can provide useful and practical solutions for a wide range of problems and application domains, with an emphasis on the fields of telecommunications and bioinformatics. This volume fills a long-existing gap, allowing researchers and practitioners to develop efficient metaheuristic algorithms to find solutions.

The book is divided into three parts:
* Part One: Introduction to Metaheuristics and Parallelism, including an Introduction to Metaheuristic Techniques, Measuring the Performance of Parallel Metaheuristics, New Technologies in Parallelism, and a head-to-head discussion on Metaheuristics and Parallelism
* Part Two: Parallel Metaheuristic Models, including Parallel Genetic Algorithms, Parallel Genetic Programming, Parallel Evolution Strategies, Parallel Ant Colony Algorithms, Parallel Estimation of Distribution Algorithms, Parallel Scatter Search, Parallel Variable Neighborhood Search, Parallel Simulated Annealing, Parallel Tabu Search, Parallel GRASP, Parallel Hybrid Metaheuristics, Parallel Multi-Objective Optimization, and Parallel Heterogeneous Metaheuristics
* Part Three: Theory and Applications, including Theory of Parallel Genetic Algorithms, Parallel Metaheuristics Applications, Parallel Metaheuristics in Telecommunications, and a final chapter on Bioinformatics and Parallel Metaheuristics

Each self-contained chapter begins with clear overviews and introductions that bring the reader up to speed, describes basic techniques, and ends with a reference list for further study. Packed with numerous tables and figures to illustrate the complex theory and processes, this comprehensive volume also includes numerous practical real-world optimization problems and their solutions.

This is essential reading for students and researchers in computer science, mathematics, and engineering who deal with parallelism, metaheuristics, and optimization in general.

Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba Bibliography

- Rank: #4817650 in Books
- Published on: 2005-09-08
- Original language: English
- Number of items: 1
- Dimensions: 9.51" h x 1.18" w x 6.44" l, 2.00 pounds
- Binding: Hardcover
- 576 pages

Editorial Review

Review
"This book nicely combines many papers on a general topic of timeliness and importance." (*Journal of the Operational Research Society*, 2008)

"…a good overview of recent metaheuristic techniques, and can be used as a starting point for developing new parallel version of the methods." (*Computing Reviews.com*, March 13, 2006)

From the Back Cover
Solving complex optimization problems with parallel metaheuristics

Parallel Metaheuristics brings together an international group of experts in parallelism and metaheuristics to provide a much-needed synthesis of these two fields. Readers discover how metaheuristic techniques can provide useful and practical solutions for a wide range of problems and application domains, with an emphasis on the fields of telecommunications and bioinformatics. This volume fills a long-existing gap, allowing researchers and practitioners to develop efficient metaheuristic algorithms to find solutions.

The book is divided into three parts:

- Part One: Introduction to Metaheuristics and Parallelism, including an Introduction to Metaheuristic Techniques, Measuring the Performance of Parallel Metaheuristics, New Technologies in Parallelism, and a head-to-head discussion on Metaheuristics and Parallelism
- Part Two: Parallel Metaheuristic Models, including Parallel Genetic Algorithms, Parallel Genetic Programming, Parallel Evolution Strategies, Parallel Ant Colony Algorithms, Parallel Estimation of Distribution Algorithms, Parallel Scatter Search, Parallel Variable Neighborhood Search, Parallel Simulated Annealing, Parallel Tabu Search, Parallel GRASP, Parallel Hybrid Metaheuristics, Parallel Multi-Objective Optimization, and Parallel Heterogeneous Metaheuristics
- Part Three: Theory and Applications, including Theory of Parallel Genetic Algorithms, Parallel Metaheuristics Applications, Parallel Metaheuristics in Telecommunications, and a final chapter on Bioinformatics and Parallel Metaheuristics

Each self-contained chapter begins with clear overviews and introductions that bring the reader up to speed, describes basic techniques, and ends with a reference list for further study. Packed with numerous tables and figures to illustrate the complex theory and processes, this comprehensive volume also includes numerous practical real-world optimization problems and their solutions.

This is essential reading for students and researchers in computer science, mathematics, and engineering who deal with parallelism, metaheuristics, and optimization in general.

About the Author
ENRIQUE ALBA, PhD, is a Professor of Computer Science at the University of Málaga, Spain. His research interests involve the design and application of evolutionary algorithms, neural networks, parallelism, and metaheuristic algorithms to solve problems in telecommunications, combinatorial optimization, and bioinformatics. Dr. Alba has published many papers in leading journals and international conferences, and has garnered international awards for his research.

Users Review

From reader reviews:

Sonja Johnson:

Have you spare time for just a day? What do you do when you have far more or little spare time? Sure, you can choose the suitable activity to get spend your time. Any person spent their very own spare time to take a go walking, shopping, or went to the actual Mall. How about open or even read a book called Parallel Metaheuristics: A New Class of Algorithms? Maybe it is to be best activity for you. You already know beside you can spend your time with the favorite's book, you can cleverer than before. Do you agree with its opinion or you have different opinion?

Judith Duncan:

What do you concerning book? It is not important along with you? Or just adding material when you want something to explain what the one you have problem? How about your time? Or are you busy person? If you don't have spare time to complete others business, it is make one feel bored faster. And you have extra time? What did you do? All people has many questions above. They must answer that question due to the fact just their can do which. It said that about e-book. Book is familiar in each person. Yes, it is right. Because start from on jardín de infancia until university need this Parallel Metaheuristics: A New Class of Algorithms to read.

Allen Scheiber:

Does one one of the book lovers? If so, do you ever feeling doubt if you are in the book store? Make an effort to pick one book that you find out the inside because don't ascertain book by its include may doesn't work at this point is difficult job because you are afraid that the inside maybe not because fantastic as in the outside search likes. Maybe you answer can be Parallel Metaheuristics: A New Class of Algorithms why because the excellent cover that make you consider about the content will not disappoint anyone. The inside or content is actually fantastic as the outside or even cover. Your reading 6th sense will directly guide you to pick up this book.

Michael Johnson:

As we know that book is significant thing to add our knowledge for everything. By a e-book we can know everything we would like. A book is a list of written, printed, illustrated or even blank sheet. Every year had been exactly added. This reserve Parallel Metaheuristics: A New Class of Algorithms was filled with regards to science. Spend your spare time to add your knowledge about your technology competence. Some people has different feel when they reading any book. If you know how big benefit from a book, you can feel enjoy to read a publication. In the modern era like today, many ways to get book that you wanted.

Read Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba for online ebook

Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba books to read online.

Online Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba ebook PDF download

Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba Doc

Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba Mobipocket

Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba EPub

EQDFVIJWY3M: Parallel Metaheuristics: A New Class of Algorithms By Enrique Alba