

1. Record Nr.	UNINA9910349284603321
Autore	Sanders Peter
Titolo	Sequential and Parallel Algorithms and Data Structures : The Basic Toolbox // by Peter Sanders, Kurt Mehlhorn, Martin Dietzfelbinger, Roman Dementiev
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-25209-4
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XV, 509 p.)
Disciplina	518.1
Soggetti	Algorithms Microprocessors Data structures (Computer science) Engineering—Data processing Algorithm Analysis and Problem Complexity Processor Architectures Data Structures and Information Theory Data Engineering Mathematics of Algorithmic Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Appetizer: Integer Arithmetic -- Introduction -- Representing Sequences by Arrays and Linked Lists -- Hash Tables and Associative Arrays -- Sorting and Selection -- Priority Queues -- Sorted Sequences -- Graph Representation -- Graph Traversal -- Shortest Paths -- Minimum Spanning Trees -- Generic Approaches to Optimization -- Collective Communication and Computation -- Load Balancing -- App. A, Mathematical Background -- App. B, Computer Architecture Aspects -- App. C, Support for Parallelism in C++ -- App. D, The Message Passing Interface (MPI) -- App. E, List of Commercial Products, Trademarks and Licenses.
Sommario/riassunto	This textbook is a concise introduction to the basic toolbox of structures that allow efficient organization and retrieval of data, key algorithms for problems on graphs, and generic techniques for

modeling, understanding, and solving algorithmic problems. The authors aim for a balance between simplicity and efficiency, between theory and practice, and between classical results and the forefront of research. Individual chapters cover arrays and linked lists, hash tables and associative arrays, sorting and selection, priority queues, sorted sequences, graph representation, graph traversal, shortest paths, minimum spanning trees, optimization, collective communication and computation, and load balancing. The authors also discuss important issues such as algorithm engineering, memory hierarchies, algorithm libraries, and certifying algorithms. Moving beyond the sequential algorithms and data structures of the earlier related title, this book takes into account the paradigm shift towards the parallel processing required to solve modern performance-critical applications and how this impacts on the teaching of algorithms. The book is suitable for undergraduate and graduate students and professionals familiar with programming and basic mathematical language. Most chapters have the same basic structure: the authors discuss a problem as it occurs in a real-life situation, they illustrate the most important applications, and then they introduce simple solutions as informally as possible and as formally as necessary so the reader really understands the issues at hand. As they move to more advanced and optional issues, their approach gradually leads to a more mathematical treatment, including theorems and proofs. The book includes many examples, pictures, informal explanations, and exercises, and the implementation notes introduce clean, efficient implementations in languages such as C++ and Java.

2. Record Nr.	UNINA9910157762503321
Autore	Burgin Logan Angela
Titolo	Breathe : When Life Takes Your Breath Away
Pubbl/distr/stampa	Savage : , : BroadStreet Publishing, , 2017 ©2017
ISBN	9781424553037 1424553032
Edizione	[1st ed.]
Descrizione fisica	1 online resource (288 p.)
Altri autori (Persone)	LoganSamson
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	What do you do when everyone around you tells you one thing, but your body and soul tell you another? In this inspirational, hope-filled memoir, one woman battles the good advice of others versus the God-advice she senses in her spirit. The life that Angela Burgin had prayed for seemed to be at hand when she finally married her love, Samson Logan, and the couple learned they were expecting their first child. The Queen City couple's life started to unravel soon after as her dream of becoming a mother turned into a nightmare. Angela sought the advice and help of her doctor when she experienced mysterious and unusual symptoms, but the doctor said it was all in her head. In her heart, Angela knew that something terrible could happen to her and her baby. In Breathe, Angela and Samson share their soul-stirring experience in a beautiful but gut-wrenching account that will give you a glimpse of hope in the darkest of times.