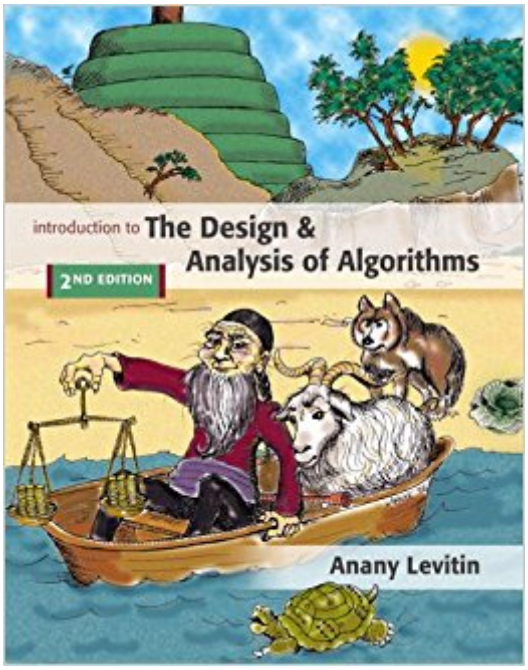
Introduction To The Design And Analysis Of Algorithms (2nd Edition)



Synopsis

Based on a new classification of algorithm design techniques and a clear delineation of analysis methods, Introduction to the Design and Analysis of Algorithms, 2e presents the subject in a truly innovative manner.Â Written in a reader-friendly style, the book encourages broad problem-solving skills while thoroughly covering the material required for introductory algorithms. The author emphasizes conceptual understanding before the introduction of the formal treatment of each technique. Popular puzzles are used to motivate readers' interest and strengthen their skills in algorithmic problem solving. Other enhancement features include chapter summaries, hints to the exercises, and a solution manual. For those interested in learning more about algorithms.

Book Information

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Customer Reviews

Algorithms Â Introduction to The Design & Analysis of Algorithms, 2nd Edition Anany Levitin, Villanova University Â Valued by students and trusted by instructors, Introduction to the Design and Analysis of Algorithms employs a comprehensive taxonomy of algorithm design techniques that is more powerful and intuitive than the traditional approach. Â It provides a coherent and pedagogically sound framework for learning and teaching algorithms. An extensive, detailed solutions manual is available online for the benefit of students and instructors. Student learning is further supported by exercise hints and chapter summaries. Popular puzzles and games provide motivation for students, and rhetorical questioning serves as an effective learning device. Â Ideal for a basic course in the design and analysis of algorithms, this Second Edition features 80 new puzzles and exercises, as well as: â ¢ Separate sections on the analysis of nonrecursive and

recursive algorithms â ¢ Coverage of empirical analysis and algorithm visualization â ¢ Revised section on approximation algorithmsâ ¢ Brand-new chapter on iterative improvement algorithms covering the simplex method, network flows, maximum matching in bipartite graphs, and the stable marriage problem

I couldn't have hoped for a better book for algorithm analysis. It eases you into the content with some puzzles, important data structure review, and the importance of studying algorithms. I like how the algorithms are presented by the general technique, and not by the problem they solve. It helped me develop a systematic way to approach the problems. Many problems are also addressed several times, so you can go back and improve algorithms done in earlier problems. The author also gets into P and NP stuff towards the end. My only grievance is that the author sometimes makes an assumption in an explanation, but with a good professor these exceptions are quickly resolved.

I've read other algorithm books like Cormen's Introduction to Algorithm's, but The Design and Analysis of Algorithms is by far the best. The chapters are organized by concepts like Greedy and Divide-and-Conquer instead of by problem types like sorting or searching. It was also written using a more conversational tone than your average computer science text, so it was much easier and more interesting to read. Overall, it's a great book that I would definitely recommend for anyone looking to learn or brush up on algorithms!

This book gave me a better understanding of the most difficult problems that are covered in algorithm class, such as Branch and Bound for the Traveling Salesman Problem, Dynamic Programming of Matrix Multiplication, and the 0-1 Knapsack problem.

A bought this as a birthday gift to my son, who is doctoral candidate in cognitive science and does a lot of specialized programming. He told me that he's found this guide very useful in its approach and content.

Very useful for software engineering interviews

good book

For those of you who've always wanted to throw the Cormen text out the window rejoice you finally

can! This book is an excellent introduction to algorithms. Though not as thorough as the Cormen text it's orders of magnitude more readable!

It was exactly as she said. I received on the time. It was clear and like new. I recommend to deal with.

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