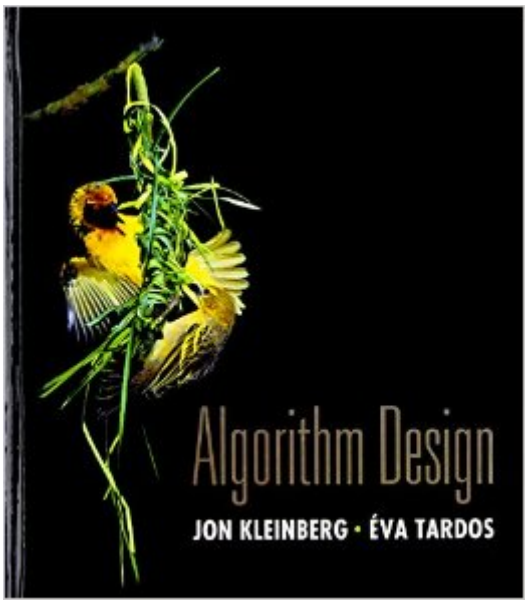
Algorithm Design



Synopsis

Algorithm Design introduces algorithms by looking at the real-world problems that motivate them. The book teaches students a range of design and analysis techniques for problems that arise in computing applications. The text encourages an understanding of the algorithm design process and an appreciation of the role of algorithms in the broader field of computer science. August 6, 2009 Author, Jon Kleinberg, was recently cited in the New York Times for his statistical analysis research in the Internet age.

Book Information

Hardcover: 864 pages

Publisher: Pearson; 1 edition (March 26, 2005)

Language: English

ISBN-10: 0321295358

ISBN-13: 978-0321295354

Product Dimensions: 8.4 x 2.1 x 9.2 inches

Shipping Weight: 3.5 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars 63 customer reviews

Best Sellers Rank: #45,731 in Books (See Top 100 in Books) #14 inÃ Â Books > Textbooks > Computer Science > Algorithms #32 inÃ Â Books > Computers & Technology > Programming > Algorithms #303 inÃ Â Books > Computers & Technology > Programming > Languages & Tools

Customer Reviews

Typically, the book is clear with its proofs and describes good methods for finding solutions to tough problems. Others have said what is good about the book, and as a reference it is great. From a student perspective it has some issues that keep cropping up over and over.The biggest issue is that the authors assume a high degree of "obviousness" in problems. I don’t mind having to make an intuitive leap to solve a problem, but this often requires an intuitive leap to understand the actual problem rather than the solution. For example, they do not often define terms used in questions, leaving the user to guess. Perhaps this should fall under the professor’s domain, but it is still frustrating. The index is not great. The authors perhaps need to re-evaluate what is common knowledge to practitioners who are not invested in the domain of algorithm analysis.Otherwise a good book. Heck, if you don’t do the exercises and just use it for reference you couldn’t do better.

This international edition is a great value, about half the normal price for me, and has the same

content. However, there are some weird things going on. My book is missing several pages of the "Exercises" section from chapter 4, and chapter 4 is, strangely, placed after chapter 5 in my book. There may be other discrepancies, though I haven't noticed any others yet. Fortunately, there are digital pdf/ebook versions available online (perfectly legally, of course) that can cover the gaps if you're in a tight spot. Nevertheless, I had to take off at least one star due to the missing pages.

Specifically with regard to ISBN 9788131703106, which is an edition printed in Asia / India, the physical quality of the book is substandard relative to most modern paperbacks.I initially thought that I had received a counterfeit copy of the book, but this was my introduction to "international edition" textbooks.I bought a new, shrink-wrapped copy of this. The text of almost every page runs right into the binding, which makes it difficult to read. The printing on some pages is very crooked. A few pages seem to have been printed on dirty or slightly wrinkled paper. The second page of the book, "About the Authors," is glued for the first half inch to the page in front of it, covering up about the first four letters of each line of text. There is no copyright page. It is not on acid-free paper.On the positive side, most pages are 100% readable if you jamb your fingers firmly into the binding to push the pages apart. So it may be a bargain if you don't mind doing that. Some of these imperfections are incidental in nature, and I don't know whether my copy is one of the better ones or one of the worse ones.I have not yet read the book, so read other reviews and ratings for that aspect. It looks like a long, dense read, but well written. There are many diagrams and some code samples throughout.I don't know if other editions have any color, but this one is only black-and-white. There does not appear to be anything needing color. Gray shading in the diagrams is perfectly legible.Some sellers mention that this is the "international edition" but others don't. So I recommend checking the ISBN of whatever edition you consider and finding out where it was printed.

I'm not normally a fan of CS textbooks, but this one is great. With the well written text, great examples, and good exercises, this book was fantastic. My only complaint is that the book lacks many solutions to the problems.Also, the international edition is a perfect soft-cover version - get this one and save a bunch.

Best undergraduate handbook about algorithms i've seen so far.Examples are much less artificial than in CLRS (Introduction to Algorithms). Most of them are highly practical, e.g. using Kruskal's MST algorithm as a simple clustering device.It's worth mentioning that E.Tardos is a world-class

calibre specialist in graph algorithms. When you feel unsatisfied with network flows chapter, you can read her survey of network flows (written with two other graph titans - Goldberg and Tarjan)The division into chapters is good, yet classical. There are also exercises after each chapter, lots of them, good for preparation if you have algorithm-oriented job interview (Google, Yahoo, Microsoft etc.).What's next? Read Tarjan's evergreen classic - Data Structures and Network Algorithms.

This is a great book on algorithms. It covers all the basics plus more in depth analysis than other algorithms books. The only downside I see is it's lack of concrete implementation. Beware there is no code in this book only higher level pseudo code so if you want specific examples with code you are better off Google-ing or looking for another book. But if you want to know about problem solving with algorithms and crafting your own algorithms from scratch then go with this book.

Algorithm Design is an approachable introduction to sophisticated computer science. It is the undergraduate CS textbook for Jon Kleinberg's introduction to algorithm design course, but I bought it for the mincut classification algorithm explanation in Chapter 7. While a useful reference for graph method algorithm design, I read most of the book from the beginning because the chapters nicely build upon themselves.I can't promise you that you'll be a great computer scientist if you master the topics in the book, but working through these examples and problems will make you better.

This is an Indian version but practically identical to the north american one. That one cost 120 at my school.

Social Innovation (Design Thinking, Design Theory) Universal Principles of Design, Revised and Updated: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design Making Design Theory (Design Thinking, Design Theory) Org Design for Design Orgs: Building and Managing In-House Design Teams Best Magazine Design Spd Annual: 29th Publication Design (Society of Publication Designers' Publication Design Annual) (v. 29) 2012 Wood Design Package - including the National Design SpecificationÃ Â® for Wood Construction (NDSÃ Â®) & NDS Supplement: Design Values for Wood Construction (4 volumes set)