The book was found

Introduction To Algorithms

INTRODUCTION TO

ALGORITHMS

THOMAS H. CORMEN

CHARLES E. LEISERSON

RONALD L. RIVEST

PDF Adobe

DOWNLOAD EBOOK
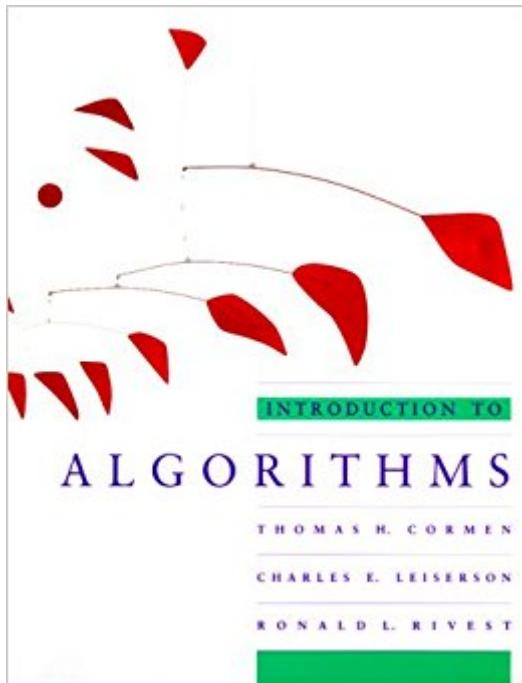
Synopsis

Written by top researchers, this text blends theory and practice. It covers the modern topics of parallel algorithms, concurrency and recurrency. A McGraw-Hill/MIT Press collaboration, the text is designed for both the instructor and the student. It offers a flexible organization with self-contained chapters, and it provides an introduction to the necessary mathematical analysis. Introduction to Algorithms contains sections that gently introduce mathematical techniques for students who may need help. This material takes students at an elementary level of mathematical sophistication and raises them to a level allowing them to solve algorithmic problems. Simple, easy-to-do exercises, as well as more thoughtful, step-by-step case-generated problems are included. The book features standard analytic notation and includes trimmed-down, easy-to-read pseudocode.

Book Information

Series: Mit Electrical Engineering and Computer Science Series

Hardcover: 768 pages

Publisher: Mcgraw-Hill College; First Edition edition (March 1, 1990)

Language: English

ISBN-10: 0070131430

ISBN-13: 978-0070131439

Product Dimensions: 2 x 8.2 x 10.2 inches

Shipping Weight: 5.2 pounds

Average Customer Review: 4.3 out of 5 stars   452 customer reviews

Best Sellers Rank: #256,459 in Books (See Top 100 in Books)   #70 inÃ Â Books > Textbooks > Computer Science > Algorithms   #173 inÃ Â Books > Computers & Technology > Programming > Algorithms   #1136 inÃ Â Books > Textbooks > Computer Science > Programming Languages

Customer Reviews

If you had to buy just one text on algorithms, Introduction to Algorithms is a magnificent choice. The book begins by considering the mathematical foundations of the analysis of algorithms and maintains this mathematical rigor throughout the work. The tools developed in these opening sections are then applied to sorting, data structures, graphs, and a variety of selected algorithms including computational geometry, string algorithms, parallel models of computation, fast Fourier transforms (FFTs), and more. This book's strength lies in its encyclopedic range, clear exposition, and powerful analysis. Pseudo-code explanation of the algorithms coupled with proof of their accuracy makes this book is a great resource on the basic tools used to analyze the performance of

algorithms. --This text refers to an out of print or unavailable edition of this title.

Thomas H. Cormen is Professor of Computer Science and former Director of the Institute for Writing and Rhetoric at Dartmouth College.Charles E. Leiserson is Professor of Computer Science and Engineering at the Massachusetts Institute of Technology.Ronald L. Rivest is Andrew and Erna Viterbi Professor of Electrical Engineering and Computer Science at the Massachusetts Institute of Technology. --This text refers to an out of print or unavailable edition of this title.

My primary intent of buying the book was to implement efficient data processing algorithms for Data warehouse application in my project and in personal big data project i am working on. I see each algorithm has detailed mathematical proof, which i think you can skip and focus on just implementing the algorithm. I am sure this book is valuable for understanding the algorithm and you would do good job in tech interview. I see that most of IT companies such as Google, Apple etc.. focus more on how well the candidate understands and implements algorithm. So its more of back to basics :).

The printing is not clear.

I could not rave more about this textbook. I read it over the course of about 9 months and would literally read a proof and look around in amazement at how much sense it made. I learned so much from this book and most importantly, I learned it *well*.There are tons of other algorithm textbooks out there but don't let the other ones fool you; this is the omnibus and the leader. I've read others (Skiena, Algorithms in a Nutshell) and although they are for different audiences, I'd still recommend CLRS in every case.Don't be fooled by the Intro in the title. It is pretty math heavy and works a lot with proofs. Most of them are explained well but sometimes they need to be read a few times because they are just more difficult material.Either way, get this book if you want to learn algorithms. I'd eat a rock if you read it and it didn't help you significantly in understanding algorithms.

I'm a software engineer without a CS degree. This book has filled in a lot of the blanks that in my knowledge of CS. It very clearly explains well known/discussed algorithms without getting too detailed in actual implementation.It does a good job at explaining use cases for algorithms and comparing similar algorithms without spending too much time on it.The book could use a reference for a lot of the symbols. I don't think that the book requires much prerequisite knowledge, but I've

been guessing at what some of the symbols mean. This is a very heavy book, both literally and figuratively. I hate suggesting more content to add, but I think a few more pages to clarify what is used on every page would be valuable.

This was bought for an undergraduate course in Analysis of Algorithms.While the book definitely is a good book and is the go-to book for algorithms courses, it actually is more of a graduate level book.As my professor explains it, it is a very mathy book and is not suited well for undergraduate (even though he made us undergraduates get it...), it's only use in undergrad is the fact you can get it while in undergrad and take it with you to graduate school.So what makes undergraduate different from graduate to make this book suited for graduate level courses?Undergraduate: Don't care about proofs or the math part, just wanna know the algorithms at a basic understanding without knowing the reason the algorithm even works at the math level. Most professors can just teach the material straight up no book for undergraduate courses honestly, the professors got PHDs they can give undergraduate level explanations on the fly.Graduate: You are required to give mathematical proofs in graduate level courses, and are expected to know the algorithm at the deepest math level. Because of the work load, this is where this book shines because the professor cannot spend everyday till midnight teaching each student how to prove every algorithm, so this book is very well suited for graduate level because it is VERY math oriented.This is a book that focuses on the math of the algorithm, but that's not entirely bad because undergraduates still may be interested in that stuff, my course just doesn't care about the proofs because there already is a graduate course for the ones in the Master's program.As for the actual content and how easy it is to understand for an undergraduate... Well I do plan to go for PHD and this book has been very helpful for that because I am motivated to take the next step. I catch a snag once in a while on trying to understand the math part, but no pain no gain!I only rated 4 stars because I haven't read the whole book yet, so giving a 5 star would be a bit awkward....

This was a required text for me in my 2013 summer course. I'll be honest and say it's a pretty comprehensive guide to algorithm analysis, and I used it heavily in doing my homework and projects, but that doesn't mean I have to like it.It's an extremely dry read in the form of a large, heavy tome. It is better used as a reference guide (or as a weapon - yikes!) than light beach reading.I wanted to like it - I thought the topic was going to be interesting, but the required readings simply didn't hold my interest nearly as well as I thought they might.I would only recommend this book if you are obsessed with analyzing algorithms, or if you simply have to have it because it is

required for a class you are taking.

This is a good book that covers a lot of ground at 1000+ pages thick. Algorithm definitions are quite comprehensive. But it's not an easy read and I wouldn't call it "an introduction".I have mathematical background and I used the book to brush up on my algorithms knowledge. It worked well for the purpose. For a beginner, though, the material will be tough to digest. The text is heavy on mathematical notation and many explanations are omitted. I imagine it was done to cut an extremely think volume to a reasonable size, but it will baffle a beginner.

Download to continue reading...

Evolutionary Algorithms in Theory and Practice: Evolution Strategies, Evolutionary Programming, Genetic Algorithms Practical Algorithms in Pediatric Nephrology: (Practical Algorithms in Pediatrics. Series Editor: Z. Hochberg) Practical Algorithms in Pediatric Gastroenterology: (Practical Algorithms in Pediatrics. Series Editor: Z. Hochberg) Practical Algorithms in Pediatric Endocrinology: (Practical Algorithms in Pediatrics. Series Editor: Z. Hochberg) Bundle of Algorithms in C++, Parts 1-5: Fundamentals, Data Structures, Sorting, Searching, and Graph Algorithms (3rd Edition) (Pts. 1-5) Practical Algorithms in Pediatric Hematology and Oncology: (Practical Algorithms in Pediatrics. Series Editor: Z. Hochberg) Introduction to Algorithms, 3rd Edition (MIT Press) Linear Programming: An Introduction to Finite Improvement Algorithms: Second Edition (Dover Books on Mathematics) Introduction to Mathematical Programming: Applications and Algorithms Ideals, Varieties, and Algorithms: An Introduction to Computational Algebraic Geometry and Commutative Algebra (Undergraduate Texts in Mathematics) An Introduction to the Analysis of Algorithms (2nd Edition) An Introduction to Bioinformatics Algorithms (Computational Molecular Biology) Algorithms in Bioinformatics: A Practical Introduction (Chapman & Hall/CRC Mathematical and Computational Biology) Introduction to Algorithms, Third Edition (International Edition) Introduction to the Design and Analysis of Algorithms (3rd Edition) Introduction to Algorithms (Eastern Economy Edition) Computer Algorithms: Introduction to Design and Analysis (3rd Edition) Introduction To Algorithms Introduction to the Design and Analysis of Algorithms (2nd Edition) Introduction to Algorithms, Second Edition

FAQ & Help