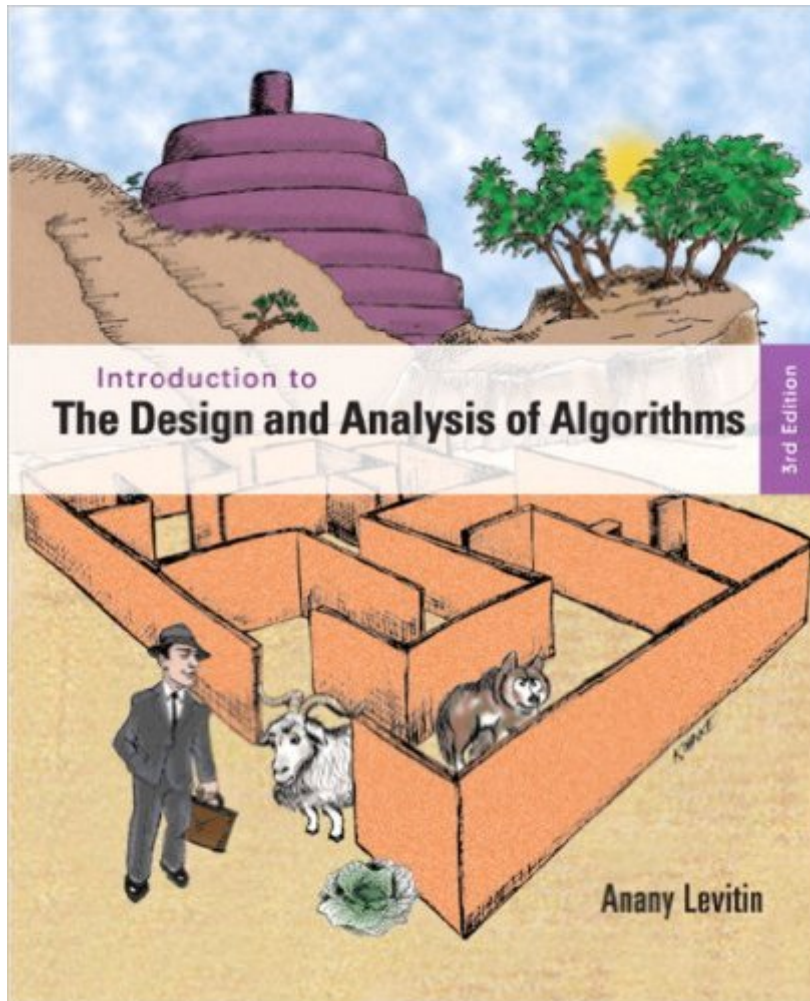# Introduction To The Design And Analysis Of Algorithms (3rd Edition)

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 presents the subject in a coherent and innovative manner. Written in a student-friendly style, the book emphasizes the understanding of ideas over excessively formal treatment while thoroughly covering the material required in an introductory algorithms course. Popular puzzles are used to motivate students' interest and strengthen their skills in algorithmic problem solving. Other learning-enhancement features include chapter summaries, hints to the exercises, and a detailed solution manual.

Book Information

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Customer Reviews

Levitin approaches this broad topic by focusing on design methods first, rather than application. After a brief introduction to efficiency analysis, he moves into elementary methods such as brute force, divide-and-conquer, etc. before broaching more difficult ideas like dynamic programming and greedy technique. In each chapter, most classes of problems that can be solved with the technique are at least mentioned, if not explained in some detail. As a beginner to computer science but having a good amount of programming experience, I was able to pick up the ideas from this book better than from my professor. Bear in mind that this book does not discuss implementation at all, but most algorithms are designed with a C-like or procedural style; you may want to follow up with a book more focused on OO design techniques if you are implementing with C++ or Java. As another reviewer mentioned, there are no solutions to the exercises, but I did find the hints helpful on a few occasions. The solution manual was provided to us by our instructor electronically. The only other

complaint is the relatively high cost; this is not a book I plan to keep around for reference due to its limited scope. Nonetheless, as a solid introduction to the field, I found it to be indispensable in my algorithms course.

Levitinâ ™s textbook is great. It is concise and precise. The explanation is generally very clear and the organization of the topic is top notch. I fully recommend it. I have to say, however, that sometimes the explanation is too brief (few examples). In that case, I usually consult another excellent and easy-to-read textbook titled â œFoundations of Algorithmsâ • by R. Neapolitan. The latter has more examples but organisation-wise I prefer Levitnâ ™s.

I had the pleasure to be taught by the write of this book. He perfectly explains each and every algorithm in there. Definitely enjoying this class and enjoying reading this book. The problems presented after each section are interesting to solve.The shipping was fast and the item received was as described. Satisfied...

As others have said the quality of the physical book is easily the worst of my college career. It is essentially newspaper print bound with a thin cover. Reading this book will be tiresome since you can see the print on the reverse of the page.I cannot believe this costs 130. Probably cost 50 cents to make.

Author made a mess trying to explain the algorithm concepts using the real world examples. No depth in material. Not a single algorithm is covered in depth. No clarity in explaining the concepts. Lots of inconsistencies !!

Great book for Computer Science, it is pretty advanced and I would recommend it for someone who is experienced with computer programming and wants to major in CS. This books concepts are not user friendly, take this in mind if you are simply wanting to know more about CS.

I inherited this book to teach an undergraduate Data Structures and Algorithms course. I would not recommend it.The gentleman who wrote this book specializes in math, and it shows. While these topics do have a math basis, the courses being taught with it are in Software Engineering and Computer Science. A lot of the topics in here are not practical, and are not presented in an introductory manner. The chapter organization does not actually help in the teaching of a course

with the book. While grouping types of algorithms per chapter is interesting, most courses will find themselves wanting to do something such as going over all sorting algorithms together for comparison, and that is a pain to do in this book. When you want all the information on graphs/trees, its spread across most of the book. The terms are defined perhaps 6 chapters before they are practically used. Additionally, the examples and pseudo-code are very math based, and that does not lend to practical experience. It's pretty hard to read at times.While algorithmic work can get very math focused, this is self-titled introductory. The book fails to be this. It is difficult and boring to read, not practical, and poorly organized. Any book I find I spend more time giving out web links to explain the topics better than the book is not one I would want to use.If you are a math major and really want to jump into computer science a bit deeper, read this book. I generally cannot recommend it for any other purpose.

Had to buy it for a class. Things are detailed and spelled out. Excellent text book. Lots of filler to go through, but everything you need is there.

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