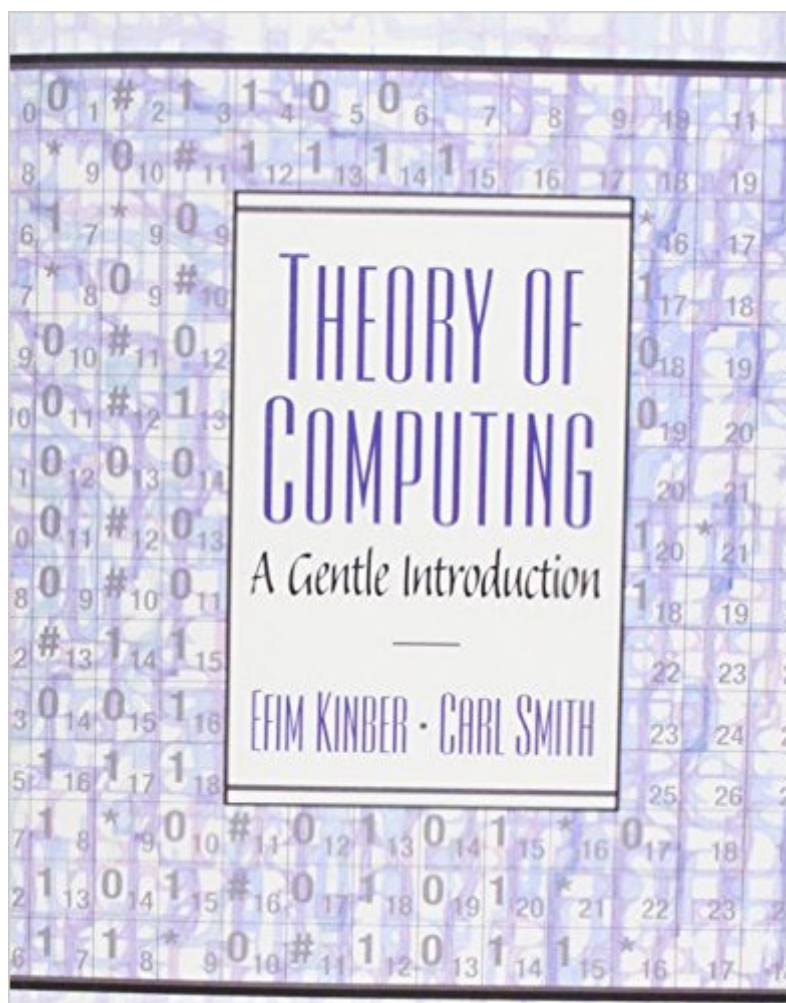# Theory Of Computing: A Gentle Introduction

Synopsis

This book focuses on fundamental issues of computation. The readers can master the content and gain lasting perspective from which to understand computers by carefully worked out examples, illustrations, and algorithmic proofs.   Teaches the fundamental concepts behind computation. Hundreds of exercises marked according to the level of difficulty provide readers ample opportunity to apply concepts. Hundreds of illustrations which enhance understanding. Only algorithmic proofs are given in the text allowing readers to calibrate the mathematical depth they want to pursue. Appropriate for upper division undergraduate and graduate level courses in Computer Science Theory, Theory of Computation, and Automata and Formal Language Theory.

Book Information

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Customer Reviews

To make my review useful, I have to say I was a teaching assistant using this book for one semester with 50+ students. I read the book from cover to cover (multiple times), solved most of the questions at the end of each chapter, graded the students' solutions, and much more.I have to say, this book is a failure.pro: the book is small, easy to read (but I doubt you can easily understand)con: too many typo! I picked one hundred, at last, I gave up.The presentation is not clear.I recommend "Elements of the Theory of Computation (2nd Edition)by Harry R. Lewis (Author), Christos H. Papadimitriou (Author)" as the introductionary book. However, if your instructor picked this book, sorry, you have to buy it. :p

This is one of two books I must say sorry to. I hope readers may find my words helpful. I must say this is a poor book, although I feel the authors did put efforts to make it nice.There are a lot of classical and excellent books on this subject. But here's the reason my department chose it as our textbook: Because the other books are relatively hard and deep for the students.But here is the response from the studnets at the end of the semester, no matter it is an A student or C student: They hate this book, since they can not get much information after spending hours and hours on it. And they eventually found those "harder" books in lib, and loved them. The key reason is, those books explained everything clearly. (In almost the same number of pages.)The key problem as I see is, the authors just understood the materials in a certain way, but not thoroughly, and not able to explain it in a clear way. Only a person who has already know all the stuff can figure out what are the authors talking about in some part of the book.Now I believe, in order to write a good textbook for students, at least you should be a master in this area.If some of my words hurts, I am sorry. But I am talking about my feeling and most students' feeling.

This is "Theory of Computing" for dummies. There are very few examples, little mathematical rigor, and an unclear presentationof the topics. It seemed like the text used the Lewis & Papadimitriou table of contents verbatim, but presented the material very weakly. I would not recommend this book.

This thin book is very easy to carry anywhere but the content of the book is not really satisfactory. I had to buy another similar book to understand some parts of this book. The problem exerciseparts are good. They have some good problems but when I get stuck on a problem, I had to open a different book to review before going on to a next problem. This book seems to assume that the most readers of this book already know what this book is talking about. This book may be suitable for those who already have enough knowledge on the theory and want to review and refresh the knowledge that they already had before.

the only thing that is good about this book is that its small. Thats it. Price is super high like its made of gold. Honestly, I found it very hard. I read chapter 1 for several times and I couldn't understand the last part of it. Anyone who reads this book has to have someone to help, eg. Teacher or a T.A. The authors just assume that we have previous knowledge about everything. Material is not well explained. It would be much better to google any topic to get a better explaination with examples.

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