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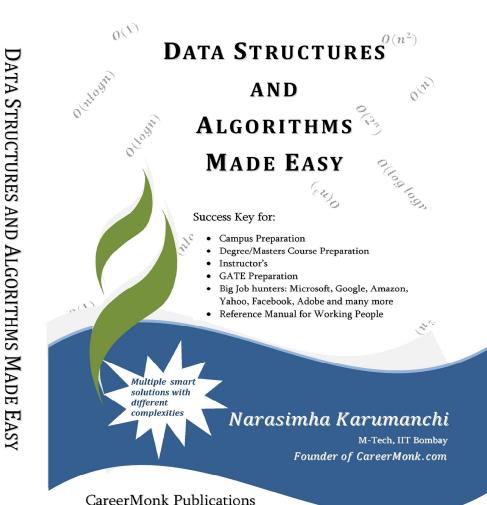
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CareerMonk Publications



To My Parents
-Laxmi and Modaiah

To My Family Members

To My Friends

To IIT Bombay

To All Hard Workers

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-Narasimha Karumanchi M-Tech, IIT Bombay Founder of CareerMonk.com

### **Preface**

### Dear Reader.

**Please Hold on!** I know many people do not read preface. But I would like to strongly recommend reading preface of this book at least. This preface has *something different* from regular prefaces.

As a *job seeker* if you read complete book with good understanding, I am sure you will challenge the interviewer's and that is the objective of this book.

If you read as an *instructor*, you will give better lectures with easy go approach and as a result your students will feel proud for selecting Computer Science / Information Technology as their degree.

This book is very much useful for the *students* of *Engineering* and *Masters* during their academic preparations. All the chapters of this book contain theory and their related problems as many as possible. There a total of approximately 700 algorithmic puzzles and all of them are with solutions.

If you read as a *student* preparing for competition exams for Computer Science/Information Technology], the content of this book covers *all* the *required* topics in full details. While writing the book, an intense care has been taken to help students who are preparing for these kinds of exams.

In all the chapters you will see more importance given to problems and analyzing them instead of concentrating more on theory. For each chapter, first you will see the basic required theory and then followed by problems.

For many of the problems, *multiple* solutions are provided with different complexities. We start with *brute force* solution and slowly move towards the *best solution* possible for that problem. For each problem we will try to understand how much time the algorithm is taking and how much memory the algorithm is taking.

It is *recommended* that, at least one complete reading of this book is required to get full understanding of all the topics. In the subsequent readings, readers can directly go to any chapter and refer. Even though, enough readings were given for correcting the errors, due to human tendency there could be some minor typos in the book. If any such typos found, they will be updated at *www.CareerMonk.com*. I request readers to constantly monitor this site for any corrections, new problems and solutions. Also, please provide your valuable suggestions at: *Info@CareerMonk.com*.

Wish you all the best. Have a nice reading.

-Narasimha Karumanchi M-Tech, IIT Bombay Founder of CareerMonk.com

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