



# ADVANCED DATA STRUCTURES

An Algorithmic Approach with C++

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KHANNA BOOK PUBLISHING EDITION

## Advanced Data Structures

**Author :** Ikvinderpal Singh

**ISBN 13 :** 978-93-81068-79-3

**ISBN 10 :** 93-81068-79-8

**E-ISBN 13 :** 978-93-81068-79-3

**Edition :** 1

**Pages :** 764

**Type of book :** Paperback

**Weight (g) :** 1006.00

**Year :** 2013

**Language :** English

**Publisher :** Khanna Publishing House

**Price :** Rs 476.00

**Categories :** [All book](#), [Computer Science Engineering](#)

**Condition Type :** New

**Country Origin :** India



**Khanna Publishing House**

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

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## Product Description

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Each chapter begins with an outline an overview, and a list of learning objective. Extensive coverage of data Structure basics, pictorial representation of each and every Data Structures in given in detail. Covers all tree structures like binary tree, binary search trees, AVL, B+-tree and red black trees in detail. Brief introduction to binary heaps, heap opearations, specifications, implementation and applications is covered. Demonstration the development of algorithms is a lucid manner. Includes numbers illustrative examples to understand the topic easily. Demonstrates the implementation of algorithms in a good programming style. Diagrams are used extensively throughout the text. Contains numerous theory questions at the last of each chapter. Gives detailed description of advanced head structures, priority queue operations, and double ended priority queues in lucid manner. Includes the concepts like dictioneries, binomial heaps, Fibonacci heaps. Data structures for disjoint sets, tables and table operations. Gives detailed description of amortized analysis, starting matching, and graph algorithms. Detailed analysis of each and every sorting and searching technique is covered with the help of programming examples. Presents various external data structures-external storage, external files, external sorting searching indexing files, external hashing. Brief introduction to the concept of file and storage management.

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