

Sedgewick, Robert

Algorithms. 2nd ed. (English) Zbl 0717.68005

Addison-Wesley Series in Computer Science. Reading, MA: Addison-Wesley. XII, 657 p.640 p. DM 80.00 (1989).

Summary: For the review of the first edition (Reading, Massachusetts; 1983) see [Zbl 0529.68002](#). From the preface: "This second edition incorporates corrections, updated information, and improvements throughout, including three major changes with significant impact overall.

First, a new section covering introductory material on data structures and the design and analysis of algorithms has been added. This sets the tone for the rest of the book and provides a framework within which more advanced algorithms are treated. Some readers may skip or skim this section; others may learn the basics there.

Second, the analysis of the algorithms is developed more fully and more rigorously than in the first edition. Specific information on performance characteristics of algorithms is encapsulated throughout in "properties", important facts about the algorithms that deserve further study.

Third (and this change is most evident), hundreds of figures have been added. Many algorithms are brought to light on an intuitive level through the visual dimension provided by these figures."

MSC:

- [68-01](#) Introductory exposition (textbooks, tutorial papers, etc.) pertaining to computer science
- [68W10](#) Parallel algorithms in computer science
- [68N01](#) General topics in the theory of software
- [68P10](#) Searching and sorting
- [68Q25](#) Analysis of algorithms and problem complexity
- [68P05](#) Data structures

Cited in 1 Review Cited in 8 Documents

Keywords:

PASCAL; string processing; pattern matching; parsing; cryptology; geometric algorithms; graph algorithms; mathematical algorithms; dynamic programming; linear programming; exhaustive search; NP-complete problems

Software:

[MacBALSA](#)