

Ming-Yang Kao (Ed.)

Encyclopedia of Algorithms

With 183 Figures and 38 Tables

With 4075 References for Further Reading

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Preface

The *Encyclopedia of Algorithms* aims to provide the researchers, students, and practitioners of algorithmic research with a mechanism to efficiently and accurately find the names, definitions, key results, and further readings of important algorithmic problems.

The work covers a wide range of algorithmic areas, and each algorithmic area is covered by a collection of entries. An encyclopedia entry is an in-depth mini-survey of an algorithmic problem and is written by an expert researcher. The entries for an algorithmic area are compiled by an area editor to survey the representative results in that area and can form the core materials of a course in the area.

The *Encyclopedia* does not use the format of a conventional long survey for several reasons. A conventional survey takes a handful of individuals too much time to write and is difficult to update. An encyclopedia entry contains the same kinds of information as in a conventional survey, but an encyclopedia entry is much shorter and is much easier for readers to absorb and for editors to update. Furthermore, an algorithmic area is surveyed by a collection of entries which together provide a considerable amount of up-to-date information about the area, while the writing and updating of the entries is distributed among multiple authors to speed up the work.

This reference work will be updated on a regular basis and will evolve towards primarily an Internet-based medium to allow timely updates and fast search. If you have feedback regarding a particular entry, please feel free to communicate directly with the author or the area editor of that entry. If you are interested in authoring an entry, please contact a suitable area editor. If you have suggestions on how to improve the Encyclopedia as a whole, please contact me at kao@northwestern.edu.

The credit of the Encyclopedia goes to the area editors, the entry authors, the entry reviewers, and the project editors at Springer, including Jennifer Evans and Jennifer Carlson.

Ming-Yang Kao
Editor-in-Chief

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