



Partitioning Point Sets in Arbitrary Dimension (Classic Reprint) (Paperback)

By Richard Cole

Forgotten Books, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Excerpt from Partitioning Point Sets in Arbitrary Dimension 1. Introduction The halfspace retrieval problem is the following. Given a set of n points in d dimensional Euclidean space, preprocess them so as to be able to quickly answer the query; how many points lie in the query half space H. (A variant of the problem, the listing problem, is to ask for a list of the points in the half space.) It is assumed that many such queries will be made. Thus it is reasonable to preprocess the set of points and to amortize the cost of this preprocessing over the (many) queries. Our first concern here is with the query time and the space used by the data structure for holding the preprocessed information. We note that the naive searching algorithm takes linear time. Thus, we aim for a sublinear search time and a data structure using linear space. A second concern is to find relatively efficient algorithms for building the data structures. Recently, an elegant approach to this problem was discovered by Willard



Reviews

This book is really gripping and interesting. It is actually full of knowledge and wisdom I am very easily will get a delight of reading a written ebook.

-- Ms. Sadie Padberg IV

A very wonderful pdf with lucid and perfect answers. Of course, it is play, nevertheless an amazing and interesting literature. You can expect to like just how the article writer compose this book.

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