Abstract

Searching is a traversal technique in a data structure to search a particular element in a given set of particular domain. Sorting Technique is generally used in a huge variety of important applications to search a particular item. There are various Searching Algorithms for different data structure having different time and space complexity. This paper contributes an efficient searching algorithm Tri-Search search which is poisoned on dividing the given elements into three unequal parts. This paper also compare the Tri-Search search algorithm with Linear Search and Binary Search. Python is used for implementation and Analysis of CPU time taken for all the three searching algorithms used. Linear search can be used with any random array elements but for binary search and Tri-Search search element must be in sorted array. Result shows that Tri-Search search algorithm requires less time for search any particular element.
Tri-Search: A New and Efficient Searching Algorithm: An Extension of Ternary Search Approach with Variable Partitioning

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Index Terms

Computer Science Algorithms
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