Implication of image processing algorithm in remote sensing and GIS applications

ABSTRACT

An algorithm solves the complex problems more efficiently and consistently. The traditional ways of solving the problems, have been replaced, by several new algorithms. The selection of an appropriate algorithm for any given chore is an imperative issue because different algorithms are based on the different concepts. One problem can be solved in more than one way; in this regards many alternative algorithms are developed with computational proficiency. This review presents evaluation and utilization of different algorithms such as Simple Recursive Algorithm, Backtracking Algorithm, Divide and Conquer Algorithm, Dynamic Algorithm, Branch and Bound Algorithm, Brute Force Algorithm and Randomized Algorithm. This paper generally analyzed and branch out algorithms to perceive their limitations and delimitation. This review emphasizes the effects and consumption of different algorithms in different image processing applications. Minimum Spanning Tree (MST), the most functional algorithm, described exclusively by the undirected graph in which all nodes are connected. Greedy algorithms expresses as a simple solution algorithm that choose a local optimum solution at each step to achieve a global optimum. We considered the drawbacks and advantage various algorithms and concluded that Greedy algorithm is comparatively better than other algorithms regarding the optimal solution.

Keyword: Greedy algorithm; Kruskal algorithm; Minimum spanning tree; Prim's algorithm