Abstract

With the increasing size of data-sets in application areas like bio-medical, hospitals, information systems, scientific data processing and predictions, finance analytics, communications, retail and marketing, it is becoming increasingly important to execute data mining tasks in parallel. At the same time, technological advancements have made shared memory-parallel computation machines commonly available to various organizations and individuals. This paper analyzes a hierarchical clustering algorithm named chameleon clustering which is based on dynamic modeling and we propose a parallel algorithm for the same. The algorithm utilizes the concept of parallel processors available and hence reduces the time to generate final clusters.
Parallel Algorithm for the Chameleon Clustering Algorithm using Dynamic Modeling

References

- J. Han and M. Kamber, &quot;Data Mining: Concepts and Techniques&quot;, Morgan Kaufmann. 2000

Index Terms

Computer Science
Artificial Intelligence
Keywords
Multicore Processors; Data Mining; Cluster analysis; Hierarchical Clustering; Chameleon; Data points; Shared Memory; Symmetric Multiprocessing(SMP); Dynamic Modeling; ParMetis