Abstract

Efficient storage and retrieval of multidimensional data in large volumes has become one of the key issues in the design and implementation of commercial and application software. The kind of queries posted on such data is also multifarious. Nearest neighbor queries are one such category and have more significance in GIS type of application. R-tree and its sequel are data partitioned hierarchical multidimensional indexing structures that help in this purpose. While general approaches are available in literature that discussing finding of Nearest neighbor for moving query point, few have explored on visible NN queries, but retrieved NN object may not always be reachable from the query object, since some obstacle objects (i.e. Hills, Rivers, Vallies) might be in between query point and NN point. This paper proposes Reachable Nearest neighbor queries for moving query object. The results are compared graphically with existing models, the proposed model out performs the existing models in a significant way.

References

Index Terms

Computer Science

Artificial Intelligence

Keywords

Multidimensional Reachable nearest neighbor Directional query