Frequent pattern mining has been an emerging and active field in data mining research for over a decade. Abundant literature has been emerged from this research and tremendous
progress has been made in numerous research frontiers. This article, provide an application of the modified Apriori algorithm in coordinate sets of trajectories to find the frequent trajectory coordinates. In this algorithm additional steps are added to prune the coordinate sets generated so that to reduce the unnecessary search time and space. This sequential pattern mining method is quite simple in nature but complex to implement. This paper explains the basics of data origination, database structure to hold the coordinate datasets and the implementation of the algorithm with the object oriented programming language by an illustration. It can be applied to interesting game domains to find the frequent trajectory of an object shot by a player which follows a trajectory path.

Reference

- J. Pei, J. Han, B. Mortazavi-Asl, Q. Chen, U. Dayal and M.C. Hsu. PrefixSpan: mining
Frequent Pattern Mining of Trajectory Coordinates using Apriori Algorithm

- X. Yan, J. Han, gSpan: graph-based substructure pattern mining, in: Proceedings of International Conference on Data Mining, 2002, pp. 721–724.
- M. Garofalakis, R. Rastogi, K. Shim, Mining sequential patterns with regular expression constraints, IEEE Transactions on Knowledge and Data Engineering 14(3) (2002) 530–552.

Index Terms

Computer Science        Knowledge Discovery

Key words

Data mining                Association mining

Frequent pattern mining

trajectory pattern mining