**SpatialColocationPatternMiningusinDelaunayTriangulation**

**Abstract**

**Spatial data mining is the process of ﬁnding interesting patterns that may implicitly exist in spatial database. The process of ﬁnding the subsets of features that are frequently found together in a same location is called Co-location pattern discovery. Earlier methods to ﬁnd co-location patterns focuses on converting neighbourhood relations to item sets.Once item sets are obtained then can apply any method for ﬁnding patterns.The criteria to know the strength of co-location patterns is participation ratio and participation index. In this paper, Delaunay triangulation approach is proposed for mining co-location patterns. Delaunay triangulation represents the closest neighbourhood structure of the features exactly which is a major concern in ﬁnding the co-location patterns. The results shows that, this approach achieves good performance when compared to earlier methodologies.**