Spatial Clustering in Databases: A Survey

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1 Introduction

1.1 Open Source

2 Assymptotic Evaluation

2.1 Generalized Search Tree

2.2 DBSCAN

Algorithm 1 DBSCAN

1: **procedure** $\textsc{Dbscan}(D, \epsilon, MinPts)$ $\qquad \triangleright D$ set of points is unclassified
2: $\quad clusterID = 0$
3: $\quad$ **for** $i \leftarrow 1, n$ **do**
4: $\quad\quad p \leftarrow D[i]$
5: $\quad\quad p.visited \leftarrow true$ $\qquad\qquad\qquad\qquad \triangleright$ Mark p as visited
6: $\quad\quad$ **if** $p.clusterID = UNCLASSIFIED$ **then**
7: $\quad\quad\quad$ **if** $\textsc{ExpandCluster}(D, p, clusterID, \epsilon, MinPts)$ **then**
8: $\quad\quad\quad\quad clusterID \leftarrow nextID(clusterID)$
9: $\quad\quad\quad$ **end if**
10: $\quad\quad$ **end if**
11: $\quad$ **end for**
12: **end procedure**

Algorithm 2 BIRCH

1: **procedure** BIRCH
2: **end procedure**

2.3   BIRCH

2.4   Fuzzy K-Means

3   Empirical Evaluation

3.1   Testing Environment

To maintain the reproducability of our results the authors decided to implement the empirical analysis using entirely open-source software.

3.2   Results

4   Discussion and Conclusion