ABSTRACT

HUDANUL HAFIIZH. Spatial Outlier Detection Based On Village Polygon in Bogor Mayor Election Data. Under the direction of HARI AGUNG ADRIANTO.

Spatial outlier detection is a technique which is used in spatial data mining for detecting outlier based on spatial dimension. This research is used for examining some outlier data by using PILWALKOT (The Mayor Election) of Bogor in 2008. Outlier is a research that diverges from other research and it is caused a suspicion that comes from the distribution of difference data in the research. A county called outlier if it is include into outlier list in Naive Algorithm. Naive Algorithm is an algorithm which is used for detecting spatial order in Bogor county data which is based on special functions. This research also compares the result into 3 methods, by using statistic Z-Value approach, division class with Equal Interval and Natural Breaks classification method and Naive algorithm. Naive algorithm shows the result which is got by using Z-Value and classification method shows some equal result. By using Z-Value approach, the result which is got for the first (1st), second (2nd), and fourth (4th) candidate and it is used in three outlier regions while the third (3rd) and fifth (5th) is used in four outlier regions. In the division class using classification method, there is a presumption that Equal Interval method is better than it. It also happens in some results which are using Naive algorithm where is had some equal results with two previous methods.

Keywords: spatial outlier detection, spatial data mining, spatial data.