

Research on Urban Point of Interest Generalization Method Based on Mapping Presentation

Authors : Chengming Li, Yong Yin, Peipei Guo, Xiaoli Liu

Abstract : Without taking account of the attribute richness of POI (point of interest) data and spatial distribution limited by roads, a POI generalization method considering both attribute information and spatial distribution has been proposed against the existing point generalization algorithm merely focusing on overall information of point groups. Hierarchical characteristic of urban POI information expression has been firstly analyzed to point out the measurement feature of the corresponding hierarchy. On this basis, an urban POI generalizing strategy has been put forward: POIs urban road network have been divided into three distribution pattern; corresponding generalization methods have been proposed according to the characteristic of POI data in different distribution patterns. Experimental results showed that the method taking into account both attribute information and spatial distribution characteristics of POI can better implement urban POI generalization in the mapping presentation.

Keywords : POI, road network, selection method, spatial information expression, distribution pattern

Conference Title : ICC 2017 : International Conference on Cartography

Conference Location : New York, USA

Conference Dates : June 04-05, 2017