

NEW ALGORITHMS FOR POINT FEATURES CARTOGRAPHIC LABEL PLACEMENT PROBLEM

ABSTRACT

Cartographic label placement is an important task in automated cartography and Geographical Information Systems (GIS). The label placement belongs to a problem area of difficult solution, leading us to the need of approximation algorithms as there is no exact algorithm that is able to solve this problem within an acceptable amount of time. A variety of methods has been proposed to generate quality labelings, with a wide range of results. In this work, we have reviewed some algorithms of the literature, and we presented methods not yet explored for point features label placement with aim to obtain a quality labeling placement for printed map, and an exact method to obtain good solutions with aim to verify heuristic solutions produced in this work.