

## **An Algorithm for the Map Labeling Problem with Two Kinds of Priorities**

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**Abstract :** We consider the problem of placing labels of the points on a plane. For each point, its position, the size of its label and a priority are given. Moreover, several candidates of its label positions are prespecified, and each of such label positions is assigned a priority. The objective of our problem is to maximize the total sum of priorities of placed labels and their points. By refining a labeling algorithm that can use these priorities, we propose a new heuristic algorithm which is more suitable for treating the assigned priorities.

**Keywords :** map labeling, greedy algorithm, heuristic algorithm, priority

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