

Active learning for density peak clustering

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Abstract—Density peak clustering (DPC) is one of the most interesting methods in recent years. By using only one parameter, the algorithm can identify the number of clusters using peak estimation based on density and detect clusters in a single step. Although the DPC has lots of advantages, however, for some real applications, it is not easy to identify exactly the number of clusters because of the complex data distribution. In this paper, we propose a new active density peak clustering that aim to improve the clustering process for DPC. The main idea of our algorithm is adding a loop of active cluster centers selection for getting label from users. Experiments results show the effectiveness of our proposed solution.

Keyword—Clustering, Density peak clustering, Active Learning



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