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Technology For You

Thursday, February 14, 2013

K-Means Clustering Advantages and Disadvantages

K-Means Advantages :

- 1) If variables are huge, then K-Means most of the times computationally faster than hierarchical clustering, if we keep k smalls.
- 2) K-Means produce tighter clusters than hierarchical clustering, especially if the clusters are globular.

K-Means Disadvantages :

- 1) Difficult to predict K-Value.
- 2) With global cluster, it didn't work well.
- 3) Different initial partitions can result in different final clusters.
- 4) It does not work well with clusters (in the original data) of Different size and Different density

Posted by **tarun gulyani** at **2:26 AM**

6 COMMENTS:



Deepika Murugan June 28, 2013 at 9:48 PM

thanks

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mounika pothuraju January 30, 2014 at 10:06 PM

To overcome this k-means disadvantages which algorithm we have to use

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Nikhil Nayanar June 3, 2014 at 5:28 AM

to overcome this either your problem should have some initial boundary constraints on the k values..or u cud optimization algorithms to minimise the cross-validation error..

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AbhiShek June 11, 2014 at 6:27 AM

You can use the new direction in clustering i.e. DBSCAN and OPTICS

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Nilesh Gaikwad April 5, 2016 at 12:39 AM

if k values are same in k means then why it is work? and how to pretend this problem

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Nilesh Gaikwad April 5, 2016 at 12:40 AM

thats means $k_1=2, k_2=5, k_3=2, \dots$

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