

Extensions to Hierarchical Clustering

- ❑ Major weaknesses of hierarchical clustering methods
 - ❑ Can never undo what was done previously
 - ❑ Do not scale well
 - ❑ Time complexity of at least $O(n^2)$, where n is the number of total objects
- ❑ Other hierarchical clustering algorithms
 - ❑ BIRCH (1996): Use CF-tree and incrementally adjust the quality of sub-clusters
 - ❑ CURE (1998): Represent a cluster using a set of well-scattered representative points
 - ❑ CHAMELEON (1999): Use graph partitioning methods on the K-nearest neighbor graph of the data