

Clustering Information Networks

Abstract:

Clustering attributed multi-graphs is the task of partitioning them into clusters based on various criteria. Many existing methods assume equal importance between vertex structural and attribute properties, while they ignore the existence of multiple edge types. Our proposed clustering methods exploit the attribute and the edge type information in an attributed multi-graph, through unified distance measures or similarity kernels, and automatically identify the importance of each edge type and attribute. Proposed approaches partition the network into clusters such that objects in the same cluster are characterized by similar attributes and connections.