

1 Graph analytic tasks:

1.1 node classification:

aims at determining the **label of nodes** based on other labeled nodes and the topology(拓扑) of the network.

methods: random walks to propagate the labels; extracts feature from nodes and apply classifier on them.

1.2 link prediction:

refers to the task of predicting missing links or links that are likely to occur in the future.

methods: similarity based methods, maximum likelihood models, probability models.

1.3 clustering

find subsets of similar nodes and group them together.

methods: attribute based models and methods which directly maximize the inter-cluster distances.

1.4 visualization

helps in providing insights into the structure of the network.