

# Networks clustering with bee colony

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Publication date

2019/8/15

Journal

Artificial Intelligence Review

Volume

52

Issue

2

Pages

1297-1309

Publisher

Springer Netherlands

Description

Clustering of networks, which represent a context, can be very useful. Clusters of a network are called communities and they form a community structure. Many community structure detection methods have been proposed in order to find the community structure. In our study, we propose a new hierarchical method for networks clustering based on bee colony. Our method based on bee colony to split a network into two networks (clusters) which maximize the quality function called modularity. After that we split each clusters (networks) until we get one node at each cluster. We use the modularity function to measure the strength of the community structure found by our method, which gives us an objective metric for choosing the number of communities (clusters) into which a network should be divided. Our method was tested on computer-generated networks, real-world networks with and without a known ...