Highlights

,

-
-
-

★

a,∗,1 , *b*,2

[a], , , , ,
[b], , , , ,

ARTICLE INFO

Keywords:

ABSTRACT

Here goes the abstract

1.

⋆

∗Corresponding author
( ); ( )
( ); ( )
ORCID(s):
1

Figure 1:

Table 1

2.

CRediT authorship contribution statement

: . : .

References

Blondel, V.D., Guillaume, J.L., Lambiotte, R., Lefebvre, E., 2008. Fast unfolding of communities in large networks. J. Stat. Mech.-Theory Exp. 2008, P10008.

Chen, Q., Wu, T.T., Fang, M., 2013. Detecting local community structure in complex networks based on local degree central nodes. Physica A. 392, 529–537.

Clauset, A., Newman, M.E.J., Moore, C., 2004. Finding community structure in very large networks. Phys. Rev. E. 70, 066111.

Danon, L., Diaz-Guilera, A., Duch, J., Arenas, A., 2005. Comparing community structure identification. J. Stat. Mech.-Theory Exp. , P09008.

Fabio, D.R., Fabio, D., Carlo, P., 2013. Profiling core-periphery network structure by random walkers. Sci. Rep. 3, 1467.

Fabricio, B., Liang, Z., 2013. Fuzzy community structure detection by particle competition and cooperation. Soft Comput. 17, 659–673.

Fortunato, S., 2010. Community detection in graphs. Phys. Rep.-Rev. Sec. Phys. Lett. 486, 75–174.

Fortunato, S., Barthelemy, M., 2007. Resolution limit in community detection. Proc. Natl. Acad. Sci. U. S. A. 104, 36–41.

Gregory, S., 2011. Fuzzy overlapping communities in networks. J. Stat. Mech.-Theory Exp. , P02017.

Havens, T.C., Bezdek, J.C., Leckie, C., Ramamohanarao, K., Palaniswami, M., 2013. A soft modularity function for detecting fuzzy communities in social networks. IEEE Trans. Fuzzy Syst. 21, 1170–1175.

Hullermeier, E., Rifqi, M., 2009. A fuzzy variant of the rand index for comparing clustering structures, in: in Proc. IFSA/EUSFLAT Conf., pp. 1294–1298.

Lancichinetti, A., Fortunato, S., 2009. Benchmarks for testing community detection algorithms on directed and weighted graphs with overlapping communities. Phys. Rev. E. 80, 016118.

Lancichinetti, A., Fortunato, S., Radicchi, F., 2008. Benchmark graphs for testing community detection algorithms. Phys. Rev. E. 78, 046110.

Li, J., Wang, X., Eustace, J., 2013. Detecting overlapping communities by seed community in weighted complex networks. Physica A. 392, 6125–6134.

Liu, J., 2010. Fuzzy modularity and fuzzy community structure in networks. Eur. Phys. J. B. 77, 547–557.

Liu, W., Pellegrini, M., Wang, X., 2014. Detecting communities based on network topology. Sci. Rep. 4, 5739.

Lou, H., Li, S., Zhao, Y., 2013. Detecting community structure using label propagation with weighted coherent neighborhood propinquity. Physica A. 392, 3095–3105.

Nepusz, T., Petróczi, A., Négyessy, L., Bazsó, F., 2008. Fuzzy communities and the concept of bridgeness in complex networks. Phys. Rev. E. 77, 016107.

Newman, M.E.J., 2013. Network data. http://www-personal.umich.edu/~mejn/netdata/.

Newman, M.E.J., Girvan, M., 2004. Finding and evaluating community structure in networks. Phys. Rev. E. 69, 026113.

Psorakis, I., Roberts, S., Ebden, M., Sheldon, B., 2011. Overlapping community detection using bayesian non-negative matrix factorization. Phys. Rev. E. 83, 066114.

Raghavan, U., Albert, R., Kumara, S., 2007. Near linear time algorithm to detect community structures in large-scale networks. Phys. Rev E. 76, 036106.

Sobolevsky, S., Campari, R., 2014. General optimization technique for high-quality community detection in complex networks. Phys. Rev. E. 90, 012811.

Sun, P., Gao, L., Han, S., 2011. Identification of overlapping and non-overlapping community structure by fuzzy clustering in complex networks. Inf. Sci. 181, 1060–1071.

Vehlow, C., Reinhardt, T., Weiskopf, D., 2013. Visualizing fuzzy overlapping communities in networks. IEEE Trans. Vis. Comput. Graph. 19, 2486–2495.

Šubelj, L., Bajec, M., 2011a. Robust network community detection using balanced propagation. Eur. Phys. J. B. 81, 353–362.

Šubelj, L., Bajec, M., 2011b. Unfolding communities in large complex networks: Combining defensive and offensive label propagation for core extraction. Phys. Rev. E. 83, 036103.

Šubelj, L., Bajec, M., 2012. Ubiquitousness of link-density and link-pattern communities in real-world networks. Eur. Phys. J. B. 85, 1–11.

Wang, W., Liu, D., Liu, X., Pan, L., 2013. Fuzzy overlapping community detection based on local random walk and multidimensional scaling. Physica A. 392, 6578–6586.
Wang, X., Li, J., 2013. Detecting communities by the core-vertex and intimate degree in complex networks. Physica A. 392, 2555–2563.
Zhang, S., Wang, R., Zhang, X., 2007. Identification of overlapping community structure in complex networks using fuzzy c-means clustering. Physica A. 374, 483–490.
Zhang, Y., Yeung, D., 2012. Overlapping community detection via bounded nonnegative matrix tri-factorization, in: In Proc. ACM SIGKDD Conf., pp. 606–614.