BIBLIOGRAPHY

- Agarwal, S. and Roth, D. Learning a sparse representation for object detection. In, European conference on computer vision. Springer; p. 113-127, 2002.
- Ahn, Y.-Y., Bagrow, J.P. and Lehmann, S. Link communities reveal multiscale complexity in networks. nature;466(7307):761-764;2010.
- Akoglu, L., Tong, H. and Koutra, D. Graph based anomaly detection and description: a survey. Data Mining and Knowledge Discovery;29(3):626-688;2015.
- Ali, M., Siarry, P. and Pant, M. An efficient differential evolution based algorithm for solving multi-objective optimization problems. European journal of operational research;217(2):404-416;2012.
- Allahyari, M., et al. A brief survey of text mining: Classification, clustering and extraction techniques. arXiv preprint arXiv:1707.02919;2017.
- Amigó, E., et al. A comparison of extrinsic clustering evaluation metrics based on formal constraints. Information retrieval;12(4):461-486;2009.
- Arenas, A., et al. Size reduction of complex networks preserving modularity. New Journal of Physics;9(6):176;2007.
- Azizifard, N. Social network clustering. IJ Information Technology and Computer Science-2014.-01.-P:76-81;2014.
- Bagalà, F., et al. Evaluation of accelerometer-based fall detection algorithms on real-world falls. PloS one;7(5):e37062;2012.
- Bagrow, J.P. and Bollt, E.M. Local method for detecting communities. Physical Review E;72(4):046108;2005.
- Ball, B., Karrer, B. and Newman, M.E. Efficient and principled method for detecting communities in networks. Physical Review E;84(3):036103;2011.
- Bansal, S., Bhowmick, S. and Paymal, P. Fast community detection for dynamic complex networks. In, Complex Networks. Springer; p. 196-207; 2011.
- Barrat, A., et al. The architecture of complex weighted networks. Proceedings of the National Academy of Sciences of the United States of America;101(11):3747-3752;2004.
- Belkin, M. and Niyogi, P. Laplacian eigenmaps for dimensionality reduction and data representation. Neural computation;15(6):1373-1396;2003.

- Bhagat, S., et al. Class-based graph anonymization for social network data. Proceedings of the VLDB Endowment;2(1):766-777;2009.
- Biswas, A. and Biswas, B. Defining quality metrics for graph clustering evaluation. Expert Systems with Applications;71:1-17;2017.
- Blondel, V.D., et al. Fast unfolding of communities in large networks. Journal of statistical mechanics: theory and experiment;2008(10):P10008;2008.
- Boccaletti, S., et al. Complex networks: Structure and dynamics. Physics reports;424(4):175-308;2006.
- Boran, F.E., et al. A multi-criteria intuitionistic fuzzy group decision making for supplier selection with TOPSIS method. Expert Systems with Applications;36(8):11363-11368;2009.
- Brandes, U., et al. On modularity clustering. IEEE transactions on knowledge and data engineering;20(2):172-188;2008.
- Bruggeman, J., Traag, V. and Uitermark, J. Detecting communities through network data. American Sociological Review;77(6):1050-1063;2012.
- Buhmann, J.M. Information theoretic model validation for clustering. In, Information Theory Proceedings (ISIT), 2010 IEEE International Symposium on. IEEE; p. 1398-1402; 2010.
- Cafieri, S., Costa, A. and Hansen, P. Reformulation of a model for hierarchical divisive graph modularity maximization. Annals of Operations Research;222(1):213-226;2014.
- Cannistraci, C.V., Alanis-Lobato, G. and Ravasi, T. From link-prediction in brain connectomes and protein interactomes to the local-community-paradigm in complex networks. Scientific reports;p-3;2013.
- Cantú-Paz, E. and Kamath, C. An empirical comparison of combinations of evolutionary algorithms and neural networks for classification problems. IEEE Transactions on Systems, Man, and Cybernetics, Part B (Cybernetics);35(5):915-927;2005.
- Carvalho, D.M., Resende, H. and Nascimento, M.C. Modularity maximization adjusted by neural networks. In, International Conference on Neural Information Processing. Springer; 2014. p. 287-294; 2017
- Cataldi, M. and Sapino, M.L. Adaptation of Hierarchical Meta-Data for Efficient Large Data Set Exploration. p. 1118;2010.
- Chakrabarti, D. and Faloutsos, C. Graph mining: Laws, generators, and algorithms. ACM computing surveys (CSUR);38(1):2;2006.

- Chakraborty, T. Leveraging disjoint communities for detecting overlapping community structure. Journal of Statistical Mechanics: Theory and Experiment; (5):P05017;2015.
- Chakraborty, T., et al. On the permanence of vertices in network communities. In, Proceedings of the 20th ACM SIGKDD international conference on Knowledge discovery and data mining. ACM; p. 1396-1405; 2014.
- Chan, E.Y. and Yeung, D.-Y. A convex formulation of modularity maximization for community detection. In, Proceedings of the Twenty-Second International Joint Conference on Artificial Intelligence (IJCAI), Barcelona, Spain. p. 2218; 2011.
- Chen, L., Jiang, Q. and Wang, S. Model-based method for projective clustering. IEEE Transactions on Knowledge and Data Engineering;24(7):1291-1305;2012.
- Chen, W., et al. A game-theoretic framework to identify overlapping communities in social networks. Data Mining and Knowledge Discovery;21(2):224-240;2010.
- Chockler, H., Kupferman, O. and Vardi, M.Y. Coverage metrics for formal verification. In, CHARME. Springer; p. 111-125; 2003.
- Chu, X., et al. Epidemic spreading in weighted scale-free networks with community structure. Journal of Statistical Mechanics: Theory and Experiment; (07):P07043;2009; 2009
- Clauset, A., Newman, M.E. and Moore, C. Finding community structure in very large networks. Physical review E;70(6):066111;2004.
- Copic, J., Jackson, M.O. and Kirman, A. Identifying community structures from network data via maximum likelihood methods. The BE Journal of Theoretical Economics;9(1);2009.
- Coscia, M., Giannotti, F. and Pedreschi, D. A classification for community discovery methods in complex networks. Statistical Analysis and Data Mining: The ASA Data Science Journal;4(5):512-546;2011.
- Crucitti, P., Latora, V. and Porta, S. Centrality measures in spatial networks of urban streets. Physical Review E;73(3):036125;2006.
- Dai, T., et al. Explore semantic topics and author communities for citation recommendation in bipartite bibliographic network. Journal of Ambient Intelligence and Humanized Computing:1-19;2017.
- Danon, L., et al. Comparing community structure identification. Journal of Statistical Mechanics: Theory and Experiment;2005(09):P09008;2005.
- Davis, G.B. and Carley, K.M. Clearing the FOG: Fuzzy, overlapping groups for social networks. Social Networks;30(3):201-212;2008.

- De Domenico, M., et al. Identifying modular flows on multilayer networks reveals highly overlapping organization in interconnected systems. Physical Review X;5(1):011027;2015.
- Ding, C.H., et al. A min-max cut algorithm for graph partitioning and data clustering. In, Data Mining, 2001. ICDM 2001, Proceedings IEEE International Conference on. IEEE; p.107-114; 2001.
- Ding, J., et al. Prediction of missing links based on multi-resolution community division. Physica A: Statistical Mechanics and its Applications;417:76-85;2015.
- Ding, Y. Community detection: Topological vs. topical. Journal of Informetrics;5(4):498-514;2011.
- Du, N., Wang, B. and Wu, B. Community detection in complex networks. Journal of Computer Science and Technology;23(4):672-683;2008.
- Duan, L. Effective and efficient correlation analysis with application to market basket analysis and network community detection. The University of Iowa; 3(2):235-274 2012.
- Duch, J. and Arenas, A. Community detection in complex networks using extremal optimization. Physical review E;72(2):027104;2005.
- Erol, O.K. and Eksin, I. A new optimization method: big bang-big crunch. Advances in Engineering Software;37(2):106-111;2006.
- Estrada, E. Community detection based on network communicability. Chaos: An Interdisciplinary Journal of Nonlinear Science;21(1):016103;2011.
- Evans, T. American college football network files.2012.
- Farrag, M.H. and Nasr, M.M. A Proposed Algorithm to Detect the Largest Community Based On Depth Level. International Journal of Advanced Networking and Applications;9(2):3362-3375;2017.
- Fatemi, M. and Tokarchuk, L. A Community Based Social Recommender System for Individuals & Groups. In, Social Computing (SocialCom), 2013 International Conference on. IEEE; p. 351-356; 2013.
- Fortunato, S. and Barthélemy, M. Resolution limit in community detection. Proceedings of the National Academy of Sciences;104(1):36-41;2007.
- Fortunato, S. and Castellano, C. Community structure in graphs. In, Computational Complexity. Springer; p. 490-512;2012.

- Fortunato, S. and Lancichinetti, A. Community detection algorithms: a comparative analysis: invited presentation, extended abstract. In, Proceedings of the Fourth International ICST Conference on Performance Evaluation Methodologies and Tools. p. 27; 2009.
- Fortunato, S. Community detection in graphs. Physics reports;486(3):75-174;2010.
- Gach, O. and Hao, J.-K. A memetic algorithm for community detection in complex networks. Parallel Problem Solving from Nature-PPSN XII:327-336;2012.
- Gao, G., et al. A generalized game theoretic framework for mining communities in complex networks. Expert Systems with Applications; 28(3):72-77;2017.
- Gao, J., et al. On community outliers and their efficient detection in information networks. In, Proceedings of the 16th ACM SIGKDD international conference on Knowledge discovery and data mining. ACM; p. 813-822; 2010.
- Getoor, L. and Diehl, C.P. Link mining: a survey. Acm Sigkdd Explorations Newsletter;7(2):3-12;2005.
- Girvan, M. and Newman, M.E. Community structure in social and biological networks. Proceedings of the national academy of sciences;99(12):7821-7826;2002.
- Gleiser, P.M. and Danon, L. Community structure in jazz. Advances in complex systems;6(04):565-573;2003.
- Gleiser, R. Massless particle decay. In.: Texas Univ., Austin (USA). Center for Particle Theory; 16(4):71-87;1973.
- Gog, A., Dumitrescu, D. and Hirsbrunner, B. Community detection in complex networks using collaborative evolutionary algorithms. Advances in Artificial Life:886-894;2007.
- Gong, M., et al. Community detection in networks by using multiobjective evolutionary algorithm with decomposition. Physica A: Statistical Mechanics and its Applications;391(15):4050-4060;2012.
- Gong, M., et al. Complex network clustering by multiobjective discrete particle swarm optimization based on decomposition. IEEE Transactions on Evolutionary Computation;18(1):82-97;2014.
- Gong, M., et al. Memetic algorithm for community detection in networks. Physical Review E;84(5):056101;2011.
- Gong, M., et al. Multiobjective immune algorithm with nondominated neighbor-based selection. Evolutionary Computation;16(2):225-255;2008.

- Gregory, S. Fuzzy overlapping communities in networks. Journal of Statistical Mechanics: Theory and Experiment;2011(02):P02017;2011.
- Guha, S. and Mishra, N. Clustering data streams. In, Data Stream Management. Springer; p. 169-187; 2016.
- Harenberg, S., et al. Community detection in large-scale networks: a survey and empirical evaluation. Wiley Interdisciplinary Reviews: Computational Statistics;6(6):426-439;2014.
- Harvey, C., Green, E.M. and Corfield, P.J. Record linkage theory and practice: an experiment in the application of multiple pass linkage algorithms. History and Computing;8(2):78-89;1996.
- Havemann, F., et al. Identification of overlapping communities and their hierarchy by locally calculating community-changing resolution levels. Journal of Statistical Mechanics: Theory and Experiment;2011(01):P01023;2011.
- Havens, T.C., et al. A soft modularity function for detecting fuzzy communities in social networks. IEEE Transactions on Fuzzy Systems;21(6):1170-1175;2013.
- Hill, R.A. and Dunbar, R.I. Social network size in humans. Human nature;14(1):53-72;2003.
- Hu, F., et al. An algorithm J-SC of detecting communities in complex networks. Physics Letters A;381(42):3604-3612;2017.
- Huang, F., Zhang, S. and Zhu, X. Discovering network community based on multi-objective optimization. Journal of Software;24(9):2062-2077;2013.
- Iqbal, M.A., et al. A novel function optimization approach using opposition based genetic algorithm with gene excitation. Int J Innov Comput Inf Control;7(7):4263-4276;2011.
- Ishibuchi, H. and Yamamoto, T. Fuzzy rule selection by multi-objective genetic local search algorithms and rule evaluation measures in data mining. Fuzzy sets and systems;141(1):59-88;2004.
- Jacobson, M.J. and Wilensky, U. Complex systems in education: Scientific and educational importance and implications for the learning sciences. The Journal of the learning sciences;15(1):11-34;2006.
- Jain, A.K. Data clustering: 50 years beyond K-means. Pattern recognition letters;31(8):651-666;2010.

- Jeh, G. and Widom, J. SimRank: a measure of structural-context similarity. In, Proceedings of the eighth ACM SIGKDD international conference on Knowledge discovery and data mining. ACM; p. 538-543; 2002.
- Ji, J., et al. Ant colony clustering with fitness perception and pheromone diffusion for community detection in complex networks. Physica A: Statistical Mechanics and its Applications;392(15):3260-3272;2013.
- Jia, G., et al. Community Detection in Social and Biological Networks Using Differential Evolution. In, LION. Springer; p. 71-85; 2012.
- Jin, D., et al. Genetic algorithm with local search for community detection in large-scale complex networks. Acta Automatica Sinica;37(7):873-882;2011.
- Kaiser, M. and Hilgetag, C.C. Spatial growth of real-world networks. Physical Review E;69(3):036103;2004.
- Kawahara, H., Masuda-Katsuse, I. and De Cheveigne, A. Restructuring speech representations using a pitch-adaptive time–frequency smoothing and an instantaneous-frequency-based F0 extraction: Possible role of a repetitive structure in sounds. Speech communication;27(3):187-207;1999.
- Kim, K.-j. and Ahn, H. A recommender system using GA K-means clustering in an online shopping market. Expert systems with applications;34(2):1200-1209;2008.
- Kohli, P. and Torr, P.H. Measuring uncertainty in graph cut solutions. Computer Vision and Image Understanding;112(1):30-38;2008.
- Kou, G., Peng, Y. and Wang, G. Evaluation of clustering algorithms for financial risk analysis using MCDM methods. Information Sciences;275:1-12;2014.
- Kou, G., Shi, Y. and Wang, S. Multiple criteria decision making and decision support systems— Guest editor's introduction. Decision Support Systems;51(2):247-249;2011.
- Labatut, V. and Balasque, J.-M. Detection and interpretation of communities in complex networks: Practical methods and application. In, Computational Social Networks. Springer; p. 81-113; 2012.
- Lancichinetti, A. and Fortunato, S. Community detection algorithms: a comparative analysis. Physical review E;80(5):056117;2009.
- Lancichinetti, A., et al. Finding statistically significant communities in networks. PloS one;6(4):e18961;2011.

- Lancichinetti, A., Fortunato, S. and Kertész, J. Detecting the overlapping and hierarchical community structure in complex networks. New Journal of Physics;11(3):033015;2009.
- Lee, A., et al. On the utility of graphics cards to perform massively parallel simulation of advanced Monte Carlo methods. Journal of computational and graphical statistics;19(4):769-789;2010.
- Lee, C., et al. Detecting highly overlapping community structure by greedy clique expansion. arXiv preprint arXiv:1002.1827;2010.
- Leicht, E.A., Holme, P. and Newman, M.E. Vertex similarity in networks. Physical Review E;73(2):026120;2006.
- Leskovec, J., et al. Community structure in large networks: Natural cluster sizes and the absence of large well-defined clusters. Internet Mathematics;6(1):29-123;2009.
- Leskovec, J., Lang, K.J. and Mahoney, M. Empirical comparison of algorithms for network community detection. In, Proceedings of the 19th international conference on World wide web. ACM; p. 631-640; 2010.
- Li, Y., Liu, G. and Lao, S.-y. A genetic algorithm for community detection in complex networks. Journal of Central South University;20(5):1269-1276;2013.
- Li, Z. and Huang, P. Quantitative measures for spatial information of maps. International Journal of Geographical Information Science;16(7):699-709;2002.
- Li, Z. and Liu, J. A multi-agent genetic algorithm for community detection in complex networks. Physica A: Statistical Mechanics and its Applications;449:336-347;2016.
- Li, Z., et al. Quantitative function for community detection. Physical review E;77(3):036109;2008.
- Liang, X., Tang, J. and Pan, L. A neighborhood vector propagation algorithm for community detection. In, Global Communications Conference (GLOBECOM), 2014 IEEE. IEEE; 2014. p. 2923-2928.
- Lin, K.-P. A novel evolutionary kernel intuitionistic fuzzy c-means clustering algorithm. IEEE Transactions on Fuzzy Systems;22(5):1074-1087;2014.
- Linderoth, J.T., Lee, E.K. and Savelsbergh, M.W. A parallel, linear programming-based heuristic for large-scale set partitioning problems. INFORMS Journal on Computing;13(3):191-209;2001.
- Liu, H. and Yu, L. Toward integrating feature selection algorithms for classification and clustering. IEEE Transactions on knowledge and data engineering;17(4):491-502;2005.

- Liu, J. Fuzzy modularity and fuzzy community structure in networks. The European Physical Journal B-Condensed Matter and Complex Systems;77(4):547-557;2010.
- Liu, X. and Murata, T. Advanced modularity-specialized label propagation algorithm for detecting communities in networks. Physica A: Statistical Mechanics and its Applications;389(7):1493-1500;2010.
- Loe, C.W. and Jensen, H.J. Comparison of communities detection algorithms for multiplex. Physica A: Statistical Mechanics and its Applications;431:29-45;2015.
- Lops, P., et al. Content-based and collaborative techniques for tag recommendation: an empirical evaluation. Journal of Intelligent Information Systems;40(1):41-61;2013.
- Low, K.-L. and Tan, T.-S. Model simplification using vertex-clustering. In, Proceedings of the 1997 symposium on Interactive 3D graphics. ACM; p. 75-ff; 1997.
- Lozano, E. Density in communities, or the most important factor in building urbanity. The urban design reader:312-327;2007.
- Lusseau, D., et al. The bottlenose dolphin community of Doubtful Sound features a large proportion of long-lasting associations. Behavioral Ecology and Sociobiology;54(4):396-405;2003.
- Lyth, D.H., Malik, K.A. and Sasaki, M. A general proof of the conservation of the curvature perturbation. Journal of Cosmology and Astroparticle Physics;2005(05):004;2005.
- Ma, L., et al. Multi-level learning based memetic algorithm for community detection. Applied Soft Computing;19:121-133;2014.
- Mahajan, A. and Kaur, M.G.; 2015. Community Detection in Complex Networks using a novel nature inspired algorithmic approach based on Ant Lion Optimizer.
- Mandala, S.R., et al. Clustering social networks using ant colony optimization. Operational Research;13(1):47-65;2013.
- Manjarres, D., et al. A novel heuristic approach for distance-and connectivity-based multihop node localization in wireless sensor networks. Soft Computing;17(1):17-28;2013.
- McDaid, A.F., Greene, D. and Hurley, N. Normalized mutual information to evaluate overlapping community finding algorithms. arXiv preprint arXiv:1110.2515;2011.
- Meila, M. Comparing clusterings by the variation of information. In, Colt. Springer; p. 173-187; 2003.
- Menendez, H.D., Barrero, D.F. and Camacho, D. A genetic graph-based approach for partitional clustering. International journal of neural systems;24(03):1430008;2014.

- Michael, J.H. Labor dispute reconciliation in a forest products manufacturing facility. Forest products journal;47(11/12):41;1997.
- Mislove, A., et al. Measurement and analysis of online social networks. In, Proceedings of the 7th ACM SIGCOMM conference on Internet measurement. ACM; p. 29-42; 2007.
- Moradi, F., Olovsson, T. and Tsigas, P. A local seed selection algorithm for overlapping community detection. In, Advances in Social Networks Analysis and Mining (ASONAM), 2014 IEEE/ACM International Conference on. IEEE; p. 1-8; 2014.
- Moradi, P. and Rostami, M. Integration of graph clustering with ant colony optimization for feature selection. Knowledge-Based Systems;84:144-161;2015.
- Nadler, B., et al. Diffusion maps-a probabilistic interpretation for spectral embedding and clustering algorithms. In, Principal manifolds for data visualization and dimension reduction. Springer; p. 238-260; 2008.
- Nematzadeh, A.: Indiana University; Information Diffusion and Behavior in Groups of Networked Individuals. 22-37;2017.
- Nepusz, T., et al. Fuzzy communities and the concept of bridgeness in complex networks. Physical Review E;77(1):016107;2008.
- Newman, M.E. and Girvan, M. Finding and evaluating community structure in networks. Physical review E;69(2):026113;2004.
- Newman, M.E. and Leicht, E.A. Mixture models and exploratory analysis in networks. Proceedings of the National Academy of Sciences;104(23):9564-9569;2007.
- Newman, M.E. Communities, modules and large-scale structure in networks. Nature Physics;8(1):25-31;2012.
- Newman, M.E. Detecting community structure in networks. The European Physical Journal B-Condensed Matter and Complex Systems;38(2):321-330;2004.
- Newman, M.E. Fast algorithm for detecting community structure in networks. Physical review E;69(6):066133;2004.
- Newman, M.E. Modularity and community structure in networks. Proceedings of the national academy of sciences;103(23):8577-8582;2006.
- Ng, A.Y., Jordan, M.I. and Weiss, Y. On spectral clustering: Analysis and an algorithm. In, Advances in neural information processing systems. p. 849-856; 2002.
- Oggier, F. and Datta, A. Self-repairing homomorphic codes for distributed storage systems. In, INFOCOM, 2011 Proceedings IEEE. IEEE; p. 1215-1223;2011

- Papadopoulos, S., Kompatsiaris, Y. and Vakali, A. Leveraging collective intelligence through community detection in tag networks. Proceedings of CKCaR;9;2009.
- Paxton, N.C., et al. A Survey of Community Detection Algorithms Based On Analysis-Intent. In, Cyber Warfare. Springer; p. 237-263; 2015.
- Peixoto, T.P. Parsimonious module inference in large networks. Physical review letters;110(14):148701;2013.
- Pentney, W. and Meila, M. Spectral clustering of biological sequence data. In, AAAI. p. 845-850; 2005.
- Pizzuti, C. A multiobjective genetic algorithm to find communities in complex networks. IEEE Transactions on Evolutionary Computation;16(3):418-430;2012.
- Pizzuti, C. Community detection in social networks with genetic algorithms. In, Proceedings of the 10th annual conference on Genetic and evolutionary computation. ACM; p. 1137-1138; 2008.
- Pizzuti, C. GA-Net: A Genetic Algorithm for Community Detection in Social Networks. In, PPSN. Springer; p. 1081-1090; 2008.
- Plantié, M. and Crampes, M. Survey on social community detection. In, Social media retrieval. Springer; p. 65-85; 2013.
- Pons, P. and Latapy, M. Computing communities in large networks using random walks. J. Graph Algorithms Appl.;10(2):191-218;2006.
- Porter, M.A., Onnela, J.-P. and Mucha, P.J. Communities in networks. Notices of the AMS;56(9):1082-1097;2009.
- Price, K., Storn, R.M. and Lampinen, J.A. Differential evolution: a practical approach to global optimization. Springer Science & Business Media; 186-198; 2006.
- Psorakis, I., et al. Overlapping community detection using bayesian non-negative matrix factorization. Physical Review E;83(6):066114;2011.
- Qin, A.K., Huang, V.L. and Suganthan, P.N. Differential evolution algorithm with strategy adaptation for global numerical optimization. IEEE transactions on Evolutionary Computation;13(2):398-417;2009.
- Qu, B.-Y. and Suganthan, P.N. Novel multimodal problems and differential evolution with ensemble of restricted tournament selection. In, Evolutionary Computation (CEC), 2010 IEEE Congress on. IEEE; p. 1-7; 2010.

- Radicchi, F., et al. Defining and identifying communities in networks. Proceedings of the National Academy of Sciences of the United States of America;101(9):2658-2663;2004.
- Raghavan, U.N., Albert, R. and Kumara, S. Near linear time algorithm to detect community structures in large-scale networks. Physical review E;76(3):036106;2007.
- Rahnamayan, S., Tizhoosh, H.R. and Salama, M.M. Opposition-based differential evolution. IEEE Transactions on Evolutionary computation;12(1):64-79;2008.
- Reichardt, J. and Bornholdt, S. Detecting fuzzy community structures in complex networks with a Potts model. Physical Review Letters;93(21):218701;2004.
- Roberts, S.A., Hall, G.B. and Calamai, P.H. Evolutionary multi-objective optimization for landscape system design. Journal of Geographical Systems;13(3):299-326;2011.
- Ronquist, F. and Huelsenbeck, J.P. MrBayes 3: Bayesian phylogenetic inference under mixed models. Bioinformatics;19(12):1572-1574;2003.
- Rossetti, G. and Cazabet, R. Community Discovery in Dynamic Networks: a Survey. arXiv preprint arXiv:1707.03186;2017.
- Rosvall, M. and Bergstrom, C.T. An information-theoretic framework for resolving community structure in complex networks. Proceedings of the National Academy of Sciences;104(18):7327-7331;2007.
- Sachan, M. and Ichise, R. Using semantic information to improve link prediction results in network datasets. International Journal of Engineering and Technology;2(4):334;2010.
- Savaresi, S.M., et al. Cluster selection in divisive clustering algorithms. In, Proceedings of the 2002 SIAM International Conference on Data Mining. SIAM; p. 299-314; 2002.
- Sethi, S.P. A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. Academy of Management Review;4(1):63-74;1979.
- Shahriary, S.R., Shahriari, M. and Noor, R. A community-based approach for link prediction in signed social networks. Scientific Programming;2015:5;2015.
- Shakya, H.K., Singh, K. and Biswas, B. Community Detection Using Differential Evolution Algorithm with Multiple Objective Function. p.3-25;2014.
- Shang, J., et al. Epidemic spreading on complex networks with overlapping and non-overlapping community structure. Physica A: Statistical Mechanics and its Applications;419:171-182;2015.
- Shen, H., et al. Detect overlapping and hierarchical community structure in networks. Physica A: Statistical Mechanics and its Applications;388(8):1706-1712;2009.

- Shi, J. and Malik, J. Normalized cuts and image segmentation. IEEE Transactions on pattern analysis and machine intelligence;22(8):888-905;2000.
- Shiga, M. and Mamitsuka, H. Clustering genes with expression and beyond. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery;1(6):496-511;2011.
- Sobin, C., Raychoudhury, V. and Saha, S. A Survey of Parallel Community Detection Algorithms. In, Handbook of Research on Applied Cybernetics and Systems Science. IGI Global; p. 1-26; 2017.
- Sousa, T., Silva, A. and Neves, A. Particle swarm based data mining algorithms for classification tasks. Parallel Computing;30(5):767-783;2004.
- Strominger, A. and Vafa, C. Microscopic origin of the Bekenstein-Hawking entropy. Physics Letters B;379(1):99-104;1996.
- Su, J. and Havens, T.C. Fuzzy community detection in social networks using a genetic algorithm. In, Fuzzy Systems (FUZZ-IEEE), 2014 IEEE International Conference on. IEEE; p. 2039-2046;2014.
- Tang, L.-Y., et al. Community structure detection based on the neighbor node degree information. International Journal of Modern Physics C;27(04):1650046;2016.
- Tang, X., et al. Learning community structures: Global and local perspectives. Neurocomputing;239:249-256;2017.
- Tiebout, C.M. A pure theory of local expenditures. Journal of political economy;64(5):416-424;1956.
- Tizhoosh, H.R. Opposition-based learning: a new scheme for machine intelligence. In, Computational intelligence for modelling, control and automation, 2005 and international conference on intelligent agents, web technologies and internet commerce, international conference on. IEEE; p. 695-701; 2005.
- Tolstedt, J.L. and Anderson, N.W. Leader-follower semi-autonomous vehicle with operator on side. In.: Google Patents; p. 71-85; 2013.
- Tyler, J.R., Wilkinson, D.M. and Huberman, B.A. Email as spectroscopy: Automated discovery of community structure within organizations. In, Communities and technologies. Springer; p. 81-96; 2003.
- Van Den Heuvel, M., Mandl, R. and Pol, H.H. Normalized cut group clustering of resting-state FMRI data. PloS one;3(4):e2001;2008.

- Vinh, N.X., Epps, J. and Bailey, J. Information theoretic measures for clusterings comparison: Variants, properties, normalization and correction for chance. Journal of Machine Learning Research;11(Oct):2837-2854;2010.
- Viswanath, B., et al. An analysis of social network-based sybil defenses. ACM SIGCOMM Computer Communication Review;40(4):363-374;2010.
- Wang, G., Liu, X. and Fan, W. A knowledge adoption model based framework for finding helpful user-generated contents in online communities. p. 18-22; 2011.
- Wang, H., Wu, Z. and Rahnamayan, S. Enhanced opposition-based differential evolution for solving high-dimensional continuous optimization problems. Soft Computing;15(11):2127-2140;2011.
- Wang, X., et al. Discovering overlapping groups in social media. In, Data Mining (ICDM), 2010 IEEE 10th International Conference on. IEEE; p. 569-578; 2010.
- Wang, X., Mohanty, N. and McCallum, A. Group and topic discovery from relations and text. In, Proceedings of the 3rd international workshop on Link discovery. ACM; p. 28-35; 2005.
- Wang, Y., et al. Community-based greedy algorithm for mining top-k influential nodes in mobile social networks. In, Proceedings of the 16th ACM SIGKDD international conference on Knowledge discovery and data mining. ACM; p. 1039-1048; 2010.
- Watts, D.J., Dodds, P.S. and Newman, M.E. Identity and search in social networks. science;296(5571):1302-1305;2002.
- Wen, X., et al. A maximal clique based multiobjective evolutionary algorithm for overlapping community detection. IEEE Transactions on Evolutionary Computation;21(3):363-377;2017.
- Weng, L., Menczer, F. and Ahn, Y.-Y. Virality prediction and community structure in social networks. Scientific reports;3:2522;2013.
- Whitney, C. and Berndt, R.S. A new model of letter string encoding: Simulating right neglect dyslexia. Progress in brain research;121:143-163;1999.
- Xiaodong, D., et al. Web community detection model using particle swarm optimization. In, Evolutionary Computation, 2008. CEC 2008.(IEEE World Congress on Computational Intelligence). IEEE Congress on. IEEE; p. 1074-1079; 2008.
- Xie, J. and Szymanski, B.K. Towards linear time overlapping community detection in social networks. In, Pacific-Asia Conference on Knowledge Discovery and Data Mining. Springer; p. 25-36; 2012.

- Xie, J., Kelley, S. and Szymanski, B.K. Overlapping community detection in networks: The state-of-the-art and comparative study. Acm computing surveys (csur);45(4):43;2013.
- Xu, X., et al. Scan: a structural clustering algorithm for networks. In, Proceedings of the 13th ACM SIGKDD international conference on Knowledge discovery and data mining. ACM; p. 824-833; 2007.
- Yakoubi, Z. and Kanawati, R. LICOD: A Leader-driven algorithm for community detection in complex networks. Vietnam Journal of Computer Science;1(4):241-256;2014.
- Yang, B., et al. Hierarchical community detection with applications to real-world network analysis. Data & Knowledge Engineering;83:20-38;2013.
- Yang, J. and Leskovec, J. Defining and evaluating network communities based on ground-truth. Knowledge and Information Systems;42(1):181-213;2015.
- Yang, T., et al. Detecting communities and their evolutions in dynamic social networks-a Bayesian approach. Machine learning;82(2):157-189;2011.
- Yang, Y., et al. Gene co-expression network analysis reveals common system-level properties of prognostic genes across cancer types. Nature communications;5:3231;2014.
- Yang, Y., et al. Is objective function the silver bullet A case study of community detection algorithms on social networks. In, Advances in Social Networks Analysis and Mining (ASONAM), 2011 International Conference on. IEEE; p. 394-397; 2011.
- Yang, Y., Guan, X. and You, J. CLOPE: a fast and effective clustering algorithm for transactional data. In, Proceedings of the eighth ACM SIGKDD international conference on Knowledge discovery and data mining. ACM; p. 682-68; 2002.
- Yazdanparast, S. and Havens, T.C. Modularity maximization using completely positive programming. Physica A: Statistical Mechanics and its Applications;471:20-32;2017.
- Yoon, K.P. and Hwang, C.-L. Multiple attribute decision making: an introduction. Sage publications; 1995.
- Zachary, W.W. An information flow model for conflict and fission in small groups. Journal of anthropological research;33(4):452-473;1977.
- Zhang, D., et al. A novel cluster validity index for fuzzy clustering based on bipartite modularity. Fuzzy Sets and Systems;253:122-137;2014.
- Zhang, H., et al. Fuzzy community detection via modularity guided membership-degree propagation. Pattern Recognition Letters;70:66-72;2016.

- Zhang, Y. and Yeung, D.-Y. Overlapping community detection via bounded nonnegative matrix tri-factorization. In, Proceedings of the 18th ACM SIGKDD international conference on Knowledge discovery and data mining. ACM; p. 606-614; 2012.
- Zhang, Z.-Y., Wang, Y. and Ahn, Y.-Y. Overlapping community detection in complex networks using symmetric binary matrix factorization. Physical Review E;87(6):062803;2013.
- Zhao, Y., Levina, E. and Zhu, J. Consistency of community detection in networks under degreecorrected stochastic block models. The Annals of Statistics;40(4):2266-2292;2012.
- Zhou, H. Distance, dissimilarity index, and network community structure. Physical review e;67(6):061901;2003.
- Zhou, T., et al. Bipartite network projection and personal recommendation. Physical Review E;76(4):046115;2007.
- Zhuhadar, L., Yang, R. and Nasraoui, O. Toward the design of a recommender system: visual clustering and detecting community structure in a web usage network. In, Proceedings of The 2012 IEEE/WIC/ACM International Joint Conferences on Web Intelligence and Intelligent Agent Technology-Volume 01. IEEE Computer Society; p. 354-361; 2012.

List of Papers Published/Presented/Communicated

- (A) International Journal
- Harish Kumar Shakya, Kuldeep Singh, Bhaskar Biswas, "Community Detection in Social Network with Regenerative Genetic Algorithm", International Journal of Pure and Applied Mathematics, ISSN: 1311-8080.
 IF-0.23 [SCOPUS]
- [2] Harish Kumar Shakya, Kuldeep Singh, Bhaskar Biswas, "Community Detection Using Differential Evolution Algorithm With Multiple Objective Function", "International Journal of Urban Design for Ubiquitous Computing" (IJUDUC) Vol.2, No.1 (2014), pp.7-14, ISSN-2205-8605.
- [3] Harish Kumar Shakya, Kuldeep Singh, Bhaskar Biswas, "Improvised Genetic Algorithm For Fuzzy Overlapping Community Detection in Social Networks", International Journal of Advance Computational Engineering and Networking (IJACEN), Vol-4, Issue-9 (2016), pp.43-49, ISSN: 2321-2063.
- [4] Harish Kumar Shakya, Kuldeep Singh, Bhaskar Biswas, "Community Detection in Social Networks Using Extended Self Organizing Map Algorithm" International conference on emerging trends in technology, science and upcoming research in computer science, DAV Institute of Management Faridabad, Volume No.04, Special Issue (01)PP. 635-642, April 2015, ISSN: 2319-8354.[IJARSE] (Journal of Advances Research in Science and Engineering), ISSN 2319-8346.
- [5] Harish Kumar Shakya, Kuldeep Singh, Bhaskar Biswas "Opposition Based Genetic Algorithm for Community Detection in Social Networks", Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, SCI, IF-0.242 [Under Review]
- [6] Harish Kumar Shakya, Kuldeep Singh, Bhaskar Biswas "An Efficient Differential Evolutionary Approach for Identifying Community in Social Networks using Multiple Objective", Special issue on Recent Advances in Machine Learning and Soft Computing, Journal of Intelligent and Fuzzy Systems, IOS press, (SCIE), ISSN: 1064-1246, IF 1.261 [Under Review].

- (B) International Conferences
- [7] Harish Kumar Shakya, Kuldeep Singh, Bhaskar Biswas, "Identifying community structure in social network using node similarity based permanence concept" (Springer), Proc. of International Conference on Computational Strategies for Next Generation Technologies (NEXTCOM-2017), CT Institute of Engineering, Management & Technology Shahpur, Jalandhar, Punjab, India, 25-26, November, 2017. [Accepted][SCOPUS]
- [8] Harish Kumar Shakya, Bhaskar Biswas," Review of Community Detection Approaches in Social Networks using Bayesian Method and Graph Theory " 2nd world congress on Information and communication technologies, PP. 34-39, 30 October – 02 November, 2012,ISSN: 2150-7996, Trivandrum (IIITM Kerala), India.
- [9] Harish Kumar Shakya, Bhaskar Biswas, "Study of Metrics for Social Network Analysis" National Conference on Artificial Intelligence and Agents Theory and Applications, December 9-11, 2011, Department of Computer Engineering, IIT–BHU, Varanasi ,India.
- [10] Harish Kumar Shakya, Bhaskar Biswas, "Software Cost Estimation Using Soft Computing Techniques" National Conference on Mathematical Modeling and Computer Simulation, March 23-25, 2012, Department of Applied Mathematics, IIT–BHU, Varanasi, India.
- [11] Harish Kumar Shakya, Bhaskar Biswas, " Soft Computing Approach for Software Cost Estimation" National Conference on Frontiers of Research and Development in Computational Sciences, March 25-26, 2012, Department of Computer Science, M.G. Kashi Vidyapith, Varanasi ,India.
- (C) Book Chapter
- [12] Harish Kumar Shakya, Kuldeep Singh, Bhaskar Biswas, "An Efficient Genetic Algorithm for Fuzzy Community Detection in Social Network", in a book titled, Advanced Informatics for Computing Research, pp- 63-72, (ISBN 978-981-10-5779-3) (Springer) Proc. of First International Conference on Advanced Informatics for Computing Research, ICAICR 2017, held in Jalandhar, India, in March 2017.[SCOPUS]

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