

Bibliography

- [1] Abouelhoda, M. I. and Ohlebusch, E., Chaining algorithms for multiple genome comparison, *J. Discrete Algorithms*, 3 (2005) 321 - 341.
- [2] Alizadeh, B. and Burkard, R. E., Inverse 1-center location problems with edge length augmentation on tree, *Computing*, 86 (2009) 331-343.
- [3] Alizadeh, B. and Burkard, R. E., Combinatorial algorithms for inverse absolute and vertex 1-center location problems on trees, *Networks*, 58 (2011) 190-200.
- [4] Althofer, I., Average distance in undirected graphs and the removal of vertices, *J. Combin. Theory Ser. B*, 48 (1990) 140-142.
- [5] Bang Ye We, Lancia, G., Bafna, V., Chao, K. M., Ravi, R. and Chuang Yi Tang, A polynomial time approximation scheme for minimum routing cost spanning trees, *SIAM Journal on Computing*, 29 (1999) 761 - 778.
- [6] Barefoot, C. A., Entringer, R. C. and Szekely, L. A., Extremal values of distances in trees, *Discrete Applied Mathematics*, 80 (1997) 37 - 56.
- [7] Barman, S., Mondal, S. and Pal, M., An efficient algorithm to find next-to-shortest path on permutation graphs, *Journal of Applied Mathematics and Computing*, 31 (2009) 369 - 384.
- [8] Barman, S.C., Mondal, S. and Pal, M., Computation of a tree 3-spanner on trapezoid graphs, *Annals of Pure and Applied Mathematics* 02 (2012) 135 - 150.
- [9] Berge, C., *Graphs and Hypergraphs*, North-Holland, Amsterdam, 1973.
- [10] Bienstock, D. and Gyon, E., Average distance in graphs with removed elements, *J. Graph Theory*, 12 (1988) 375 - 390.
- [11] Burton, D. and Toint, Ph. L., On an instance of the inverse shortest paths problem, *Math. Programming*, 53 (1992) 45-61.

- [12] Burkard, R. E., Pleschiutschnig, C. and Zhang, J., Inverse median problems, *Discrete Optimization*, 1 (2004) 23-39.
- [13] Burkard, R. E., Pleschiutschnig, C. and Zhang, J., The inverse 1-median problem on a cycle, *Discrete Optimization*, 16 (2007) 50-67.
- [14] Burkard, R. E., Galavii, M. and Gassner, E., The inverse Fermal-Weber problem, *Technical Report 2008-14*, Graz University of Technology, Graz, 2008.
- [15] Burkard, R. E., Alizadeh, B., Inverse center location problems, *International Symposium on Combinatorial Optimization*, 36 (2010) 105-110.
- [16] Cai, M. C. and Li, Y. J., Inverse matroid intersection problem, *ZOR Math. Meth. Oper. Res.* 45 (1997) 235-243.
- [17] Cai, M. C., Yang, X. G. and Zhang, J. Z., The complex analysis of the inverse center location problem, *Journal of Global Optimization*, 15 (1999) 213-218.
- [18] Carlisle, M. C. and Loyd, E. L., On the k -coloring of intervals, *LNCS, 497, ICCI'91*, (1991) 90-101.
- [19] Chanas, S., Delgado, M., Verdgay, J.L. and Vila, M.A., Ranking fuzzy interval numbers in the setting of random sets, *Inform. Sci.*, 69 (3) (1993) 201 - 217.
- [20] Chanas, S., Zielinski, P., Ranking fuzzy interval numbers in the setting of random sets-further results, *Inform. Sci.*, 117 (1999) 191 - 200.
- [21] Chen, C. C. Y. and Das, S. K., Breath-first traversal of trees and integer sorting in parallel, *Information Processing Letters*, 41 (1992) 39 - 49.
- [22] Cheah, F. and Corneil, D.G., On the structure of trapezoid graphs, *Discrete Applied Mathematics*, 66 (1996) 109-133.
- [23] Chung, F. R. K., The average distance and independence number, *J. Graph Theory*, 12 (1988) 229 - 135.
- [24] Corneil, D.G., and Kamula, P.A., Extensions of permutation and interval graphs, *Proceedings of 18th Southeastern Conference on Combinatorics, Graph Theory and Computing*, 58 (1987) 267-275.
- [25] Craine, WL., Characterizations of fuzzy interval graphs, *Fuzzy sets and systems*, 68 (1994) 181 - 193.

- [26] Dagan, I., Golumbic, M. C. and Pinter, R. Y., Trapezoid graphs and their coloring, *Discrete Applied Mathematics*, 21 (1988) 35-46.
- [27] Dahlhaus, E., Dankelmann, P., Goddard, W. and Swart, H. C., MAD trees and distance-hereditary graphs, *Discrete Applied Mathematics*, 131 (2003) 151 - 167.
- [28] Dahlhaus, E., Dankelmann, P. and Ravi, R., A linear time algorithm to compute a MAD tree of an interval graph, *Information Processing Letters*, 89 (2004) 255 - 259.
- [29] Dankelmann, P., Computing the average distance of an interval graphs, *Information Processing Letters*, 48 (1993) 311 - 314.
- [30] Daskin, M. S., *Network and discrete location: modeles, algorithms and applications*, Wiley, New York, 1995.
- [31] Deng, X., Hell, P. and Huang, J., Linear time representation algorithms for proper circular-arc graphs and proper interval graphs, *SIAM J. Comput.*, 25 (1996) 390 - 403.
- [32] Deo, N., *Graph theory with applications to engineering and computer science*, Prentice Hall of India Private Limited, New Delhi, 1990.
- [33] Dial, R. B., Minimal-revenue congestion pricing part-I: A fast algorithm for the single-origin case, *Transportation Res. Part B*, 33 (1999) 189-202.
- [34] Drezner, Z., Hamacher, H. W., *Facility location, applications and theory*, Springer, Berlin, 2004.
- [35] Dubois, D., Prade, H., *Fuzzy Sets and Systems: Theory and Applications*, Academic Press, New York, 1980.
- [36] Dubois, D., Prade, H., Ranking fuzzy numbers in the setting of possibility theory, *Inform. Sci.*, 30 (1983) 183 - 224.
- [37] Duin, C. W. and Volgenant, A., Some inverse optimization problems under the Hamming distance, *European Journal of Operational Research*, 170 (2006) 887-899.
- [38] Engl, H. W., Hanke, M. and Neubauer, A., *Regularization of inverse problems*, Kluwer Academic Publishers Group: Dordrecht, 1996.
- [39] Fabri, J., Automatic Storage Optimization, (*UMI Press Ann Arbor, MI*, 1982).
- [40] Farber, M., Characterizations of strongly chordal graphs, *Discrete Mathematics*, 43 (1983) 173-189.

- [41] Favaron, O., Kouider, M. and Maheo, M., Edge-vulnerability and mean distance, *Networks*, 19 (1989) 493 - 504.
- [42] Felsner, S., Muller, R. and Wernisch, L., Trapezoid Graphs and generalizations, geometry and algorithms *Discrete Applied Math.*, 74 (1997) 13 - 32.
- [43] Francis, R. L., McGinnis, L. F. and White, J. A., *Facility layout and location, an analytical approach*, Prentice Hall, Englewood Cliffs, 1992.
- [44] Gassner, E., The inverse 1-maxian problem with edge length modification, *J. Combinatorial Optimization*, 16 (2007) 50-67.
- [45] Galavi, M., *Inverse 1-median problems*, Ph. D. thesis, Institut of Optimization and Discrete Mathematics, Graz University of Technology, Graz, 2008.
- [46] Gassner, E., An inverse approach to convex ordered median problems in trees, *Technical Report 2008-16, Graz University of Technology*, Graz, 2008.
- [47] Garey, M.R. and Jhonson, D.S., Computers and Interactibility: A Guide to the Theory of NP Completeness, (*W. H. Freeman and Company, San Fransisco*, 1979).
- [48] Ghosh, P. K. and Pal, M., An Optimal algorithm to solve 2-neighbourhood covering problem on trapezoid graph, *Advanced Modeling and Optimization*, 9(1) (2007) 15-36.
- [49] Golumbic. M. C., *Algorithmic graph theory and perfect graphs*, Academic Press, New York, 1980).
- [50] Golumbic, M. C., *Algorithmic Graph Theory and Perfect Graphs*, Academic Press, New York, 2004.
- [51] Guan, X. and Zhang, J., Inverse bottleneck optimization problems under weighted Hamming Distance, *Lecture Notes in Computer Science*, 4041 (2006) 220-230.
- [52] Hashimoto, A., Stevens, J., Wire routing by optimizing channel assignment within large apertures, *Proc., 8th IEEE Design Automation Workshop*, 71 (1971) 155-169.
- [53] Hendry, G. R. T., On mean distance in certain classes of graphs, *Networks*, 19 (1989) 451 - 557.
- [54] Heuberger, C. Inverse combinatorial optimization: A survey on problems, methods, and results, *Journal of Combinatorial Optimization*, 8 (2004) 329-361.

- [55] Johnson, D. S., Lenstra, J. K. and Rinnooy-Kan, A. H. G., The complexity of the network design problem, *Networks*, 8 (1978) 279 - 285.
- [56] Jungck, J. R., Dick, O. and Dick, A. G., Computer assisted sequencing, interval graphs and molecular evolution, *Biosystem*, 15 (1982) 259-273.
- [57] Jurgen, E., Extremal interval graphs, *J. Graph Theory*, 17 (1993) 117 - 127.
- [58] Kellerer, H., Pferschy, U. and Pisinger, D., *Knapsack problems*, Springer, Berlin, 2004.
- [59] Langley, L., Recognition of orders of interval dimension 2, *Discrete Applied Math.*, 60 (1995) 257 - 266.
- [60] Liang, Y. D., Domination in trapezoid graphs, *Information Processing Letters*, 52 (1994) 309-315.
- [61] Lin, Y. L., Circular and circle trapezoid graphs, *J. Sci. Eng. Tech.*, 2 (2006) 11 - 17.
- [62] Ma, T. and Spinrad, J. P., an $O(n^2)$ algorithm for 2-chain problem on certain classes of perfect graphs, In: *Proc. 2nd ACM-SIAM Symp. on Discrete Algorithms*, 1991.
- [63] Maity, K., Pal, M. and Pal, T. K., An optimal algorithm to find all-pairs shortest paths problem weighted cactus graphs, *V. U. J. Physical Science*, 6 (2000) 45-57.
- [64] Mandal, S. and Pal, M., A sequential algorithm to solve next-to-shortest path problem on circular-arc graphs, *Journal of Physical Sciences*, 10 (2006) 201 - 217.
- [65] Mandal, S. and Pal, M., Maximum weight independent set of circular-arc graph and its application, *Journal of Applied Mathematics and Computing*, 22 (2006) 161 - 174.
- [66] Mandal, S., Pal, A. and Pal, M., An optimal algorithm to find centres and diameter of a circular-arc graph, *Advanced Modeling and Optimization*, 9 (2007) 155 - 170.
- [67] Mandal, S. and Pal, M., An optimal sequential algorithm to compute all hinge vertices on circular-arc graphs, *Arab Journal of Mathematics and Mathematical Sciences*, 1 (2007) 1 - 12.
- [68] Marlow, B., Inverse problems, <http://www.inverse-problems.com/>. Megiddo, N., Linear-time algorithms for linear programming in R^3 and related problems, *SIAM J. Comput.*, 12 (1983) 759-776.
- [69] Mirchandani, B. P. and Francis, R. L., *Discrete location theory*, Wiley, New York, 1990.

- [70] Mohar, B., Eigenvalues, Diameter and mean distance in graphs, *Graphs and Combinatorics*, 7 (1991) 53 - 64.
- [71] Mondal, S., Pal, M. and Pal, T. K., An optimal algorithm for solving all-pairs shortest paths on trapezoid graphs, *Intern. J. Comput. Engg. Sci.* 3 (2002) 103-116.
- [72] Mondal, S., Pal, M. and Pal, T. K., An optimal algorithm to solve 2-neighbourhood-covering problem on interval graphs, *Intern. J. Computer Math.*, 79 (2002) 189-204.
- [73] Mondal, S., Pal, M. and Pal, T. K., An optimal algorithm to solve the all-pairs shortest paths problem on permutation graphs, *Journal of Mathematics Modelling and Algorithms*, 2 (2003) 57 - 65.
- [74] Mondal, S., Pal, A. and Pal, M., An optimal algorithm to find centres and diameter of a circular-arc graph, *Advanced Modeling and Optimization*, 9 (2007) 155 - 170.
- [75] Mondal, S. and Pal, M., An optimal sequential algorithm to compute all hinge vertices on circular-arc graphs, *Arab Journal of Mathematics and Mathematical Sciences*, 1 (2007) 1 - 12.
- [76] Mondal, S., An efficient algorithm for computation of a minimum average distance tree on trapezoid graphs, *Journal of Scientific Research and Reports*, 2 (2013) 598 - 611.
- [77] Moser, T. J., Shortest paths calculation of seismic rays, *Geophysics*, 56 (1991) 59-67.
- [78] Nickel, S., Puerto, J., *Location theory, a unified approach*, Springer, Berlin, 2005.
- [79] Ohtsuki. T., Mori. H., Khu. E. S., Kashiwabara. T. and Fujisawa. T., One dimensional logic gate assignment and interval graph, *IEEE Trans. Circuits and Systems*, 26 (1979) 675-684.
- [80] Olariu, S., Schwing, J. and Zhang, J., Optimal parallel algorithms for problems modeled by a family of intervals, *IEEE Transactions on Parallel and Distributed Systems*, 3 (1992) 364 - 374.
- [81] Pal, M. and Bhattacharjee, G. P., Optimal sequential and parallel algorithms for computing the diameter and centre of an interval graph, *Intern. J. Computer Math.*, 59 (1995) 1-13.
- [82] Pal, M. and Bhattacharjee, G. P., The parallel algorithms for determining edge-packing and efficient edge dominating sets in interval graphs, *Parallel Algorithms and Applications*, 7 (1995) 193-207.

- [83] Pal, M. and Bhattacharjee, G. P., A data structure on interval graphs and its applications, *J. Circuits, Systems, and Computers*, 7(3) (1997) 165–175.
- [84] Pal, M. and Bhattacharjee, G. P., An optimal parallel algorithm for all-pairs shortest paths on unweighted interval graphs, *Nordic J. Computing*, 4 (1997) 342-356.
- [85] Paul, S., Pal, M. and Pal, A., $L(2,1)$ — labelling of circular-arc graph, *Annals of Pure and Applied Mathematics*, 5 (2014) 208-219.
- [86] Pnueli, A., Lempel. A. and Even, S., Transitive orientation of graphs and identification of permutation graphs, *Canad. J. Math.*, 23 (1971) 160 - 175.
- [87] Pramanik, T., Mondal, S., Pal, M., Minimum 2-tuple dominating set of an interval graphs, *International Journal of Combinatorics*, 2011 (2011) 1 - 14.
- [88] Rana, A., Pal, A. and Pal, M., The k -neighbourhood covering problem on permutation graphs, *Advanced Modeling and Optimization* 13(3) (2011) 463 - 476 .
- [89] Rashmanlou, H. and Jun, Y. B., Complete interval-valued fuzzy graphs, *Annals of Fuzzy Mathematics and Informatics*, 6 (2013) 677 - 687.
- [90] Saha, A., Pal, M. and Pal, T. K., An optimal parallel algorithm for solving all-pairs shortest paths problem on circular-arc graphs, *Journal of Applied Mathematics and Computing*, 17 (2005) 1 - 23.
- [91] Saha, A., Pal, M. and Pal, T. K., An optimal parallel algorithm to construct a tree 3-spanner on intreval graphs, *International Journal of Computer Mathematics*, 3 (2005) 259-274.
- [92] Saha, A., Computation of average distance, radius and center of a circular-arc graph in parallel, *Journal of Physical Sciences*, 10 (2006) 178 - 187.
- [93] Saha, A., Pal, M. and Pal, T. K., Selection of program slots of television channels for giving advertisement : A graph theoretic approach, *Information Sciences*, 177(12) (2007) 2480 - 2492.
- [94] Sengupta, A. and Pal, T. K., Theory and methodology on comparing interval numbers, *Eur. J. Oper. Res.*, 127 (2000) 28 - 43.
- [95] Stahl F., Circular genetic maps, *J. Cell Physiol*, 70 (Suppl. 1) (1967) 1 - 12.

- [96] Tarjan, R. E., Depth first search and linear graph algorithm, *SIAM J. Comput.*, 2 (1972) 146 - 160.
- [97] Trotter, William T., Combinatorics and Partially Order Sets, (*Johns Hopkins, Baltimore*, 1992).
- [98] Tucker, A., Structure theorems for some circular-arc graphs, *Discrete Mathematics*, 7 (1974) 167 - 195.
- [99] Tucker, A., An efficient test for circular-arc graphs, *SIAM J. Comput.*, 9 (1980) 1 - 24.
- [100] Winkler, P., Mean distance in a tree, *Discrete Applied Math.*, 27 (1990) 179 - 185.
- [101] Yang, C. and Zhang, J. Z., Two general methods for inverse optimization problems, *Appl. Math. Lett.* 12 (1999) 69-72.
- [102] Yang, X. and Zhang, J., Inverse center location problem on a tree, *Journal of Systems Science and Complexity*, 21 (2008) 651-664.
- [103] Zhang, J. Z. and Liu, Z. H., Calculating some inverse linear programming problems, *J. Computational and Applied Mathematics*, 72 (1996) 261-273.
- [104] Zhang, J. Z. and Ma, Z. F., A network flow method for solving some inverse combinatorial optimization problems, *Optimization*, 37 (1996) 59-72.