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Optimization by GRASP

Greedy Randomized Adaptive
Search Procedures

- C.C. Ribeiro and S. Urrutia. Heuristics for the mirrored traveling tournament problem. *European Journal of Operational Research*, 179:775–787, 2007.
- C.C. Ribeiro, E. Uchoa, and R.F. Werneck. A hybrid GRASP with perturbations for the Steiner problem in graphs. *INFORMS Journal on Computing*, 14:228–246, 2002.
- C.C. Ribeiro, I. Rossetti, and R. Vallejos. On the use of run time distributions to evaluate and compare stochastic local search algorithms. In T. Stützle, M. Biratari, and H.H. Hoos, editors, *Engineering stochastic local search algorithms*, volume 5752 of *Lecture Notes in Computer Science*, pages 16–30. Springer, Berlin, 2009.
- C.C. Ribeiro, I. Rossetti, and R.C. Souza. Effective probabilistic stopping rules for randomized metaheuristics: GRASP implementations. In C.A.C. Coello, editor, *Learning and intelligent optimization*, volume 6683, pages 146–160. Springer, Berlin, 2011.
- C.C. Ribeiro, I. Rossetti, and R. Vallejos. Exploiting run time distributions to compare sequential and parallel stochastic local search algorithms. *Journal of Global Optimization*, 54:405–429, 2012.
- C.C. Ribeiro, I. Rossetti, and R.C. Souza. Probabilistic stopping rules for GRASP heuristics and extensions. *International Transactions in Operational Research*, 20:301–323, 2013.
- M.H.F. Ribeiro, V.F. Trindade, A. Plastino, and S.L. Martins. Hybridization of GRASP metaheuristic with data mining techniques. In *Proceedings of the ECAI Workshop on Hybrid Metaheuristics*, pages 69–78, Valencia, 2004.
- M.H.F. Ribeiro, A. Plastino, and S.L. Martins. Hybridization of GRASP metaheuristic with data mining techniques. *Journal of Mathematical Modelling and Algorithms*, 5:23–41, 2006.
- R.Z. Ríos-Mercado and E. Fernández. A reactive GRASP for a commercial territory design problem with multiple balancing requirements. *Computers & Operations Research*, 36:755–776, 2009.
- Y. Rochat and É. Taillard. Probabilistic diversification and intensification in local search for vehicle routing. *Journal of Heuristics*, 1:147–167, 1995.
- F.J. Rodriguez, C. Blum, C. García-Martínez, and M. Lozano. GRASP with path-relinking for the non-identical parallel machine scheduling problem with minimising total weighted completion times. *Annals of Operations Research*, 201:383–401, 2012.
- D.P. Ronconi and L.R.S. Henriques. Some heuristic algorithms for total tardiness minimization in a flowshop with blocking. *Omega*, 37:272–281, 2009.
- I. Rossetti. *Sequential and parallel strategies of GRASP with path-relinking for the 2-path network design problem*. PhD thesis, Department of Computer Science, Pontifical Catholic University of Rio de Janeiro, Rio de Janeiro, 2003. In Portuguese.
- B. Roy and B. Sussmann. Les problèmes d’ordonnancement avec contraintes disjonctives. Technical Report Note DS no. 9 bis, SEMA, Montrouge, 1964.

- M.A. Salazar-Aguilar, R.Z. Ríos-Mercado, and J.L. González-Velarde. GRASP strategies for a bi-objective commercial territory design problem. *Journal of Heuristics*, 19:179–200, 2013.
- J. Santamaría, O. Cordón, S. Damas, R. Martí, and R.J. Palma. GRASP & evolutionary path relinking for medical image registration based on point matching. In *2010 IEEE Congress on Evolutionary Computation*, pages 1–8. IEEE, 2010.
- J. Santamaría, O. Cordón, S. Damas, R. Martí, and R.J. Palma. GRASP and path relinking hybridizations for the point matching-based image registration problem. *Journal of Heuristics*, 18:169–192, 2012.
- D. Santos, A. de Sousa, and F. Alvelos. A hybrid column generation with GRASP and path relinking for the network load balancing problem. *Computers & Operations Research*, 40:3147–3158, 2013.
- L.F. Santos, M.H.F. Ribeiro, A. Plastino, and S.L. Martins. A hybrid GRASP with data mining for the maximum diversity problem. In M.J. Blesa, C. Blum, A. Roli, and M. Sampels, editors, *Hybrid metaheuristics*, volume 3636 of *Lecture Notes in Computer Science*, pages 116–127. Springer, Berlin, 2005.
- L.F. Santos, C.V. Albuquerque, S.L. Martins, and A. Plastino. A hybrid GRASP with data mining for efficient server replication for reliable multicast. In *Proceedings of the 49th Annual IEEE GLOBECOM Technical Conference*, pages 1–6, San Francisco, 2006. IEEE. doi: 10.1109/GLOCOM.2006.246.
- L.F. Santos, S.L. Martins, and A. Plastino. Applications of the DM-GRASP heuristic: A survey. *International Transactions on Operational Research*, 15:387–416, 2008.
- M. Sarrafzadeh and D. Lee. A new approach to topological via minimization. *IEEE Transactions on Computer-Aided Design*, 8:890–900, 1989.
- M. Scaparra and R. Church. A GRASP and path relinking heuristic for rural road network development. *Journal of Heuristics*, 11:89–108, 2005.
- A. Scholl, R. Klein, and W. Domschke. Pattern based vocabulary building for effectively sequencing mixed-model assembly lines. *Journal of Heuristics*, 4:359–381, 1998.
- A. Schrijver. *Theory of linear and integer programming*. Wiley, New York, 1986.
- B. Selman, H.A. Kautz, and B. Cohen. Noise strategies for improving local search. In *Proceedings of the Twelfth National Conference on Artificial Intelligence*, pages 337–343, Seattle, 1994. American Association for Artificial Intelligence.
- S. Senju and Y. Toyoda. An approach to linear programming with 0-1 variables. *Management Science*, 15:196–207, 1968.
- K. Seo, S. Hyun, and Y.-H. Kim. A spanning tree-based encoding of the MAX CUT problem for evolutionary search. In C.A.C. Coello, V. Cutello, K. Deb, S. Forrest, G. Nicosia, and M. Pavone, editors, *Parallel problem solving from nature - Part I*, volume 7491 of *Lecture Notes in Computer Science*, pages 510–518. Springer, Berlin, 2012.
- I.V. Sergienko, V.P. Shilo, and V.A. Roshchin. Optimization parallelizing for discrete programming problems. *Cybernetics and Systems Analysis*, 40:184–189, 2004.