

Local search

bibliography list

Most of the material appears in chapter 12 of the book by Kleinberg and Tardos [3]. The bad example for the running time of the local search for max cut is from [4]. The local search algorithm of Kernighan and Lin for minimum bisection appears in [2]. The experiments with this algorithm are from [1].

References

- [1] David S. Johnson, Cecilia R. Aragon, Lyle A. McGeoch, and Catherine Schevon. Optimization by simulated annealing: An experimental evaluation. part I, graph partitioning. *Oper. Res.*, 37(6):865–892, October 1989.
- [2] B. W. Kernighan and S. Lin. An efficient heuristic procedure for partitioning graphs. *The Bell System Technical Journal*, 49(2):291–307, Feb 1970.
- [3] Jon Kleinberg and Eva Tardos. *Algorithm Design*. Addison-Wesley Longman Publishing Co., Inc., Boston, MA, USA, 2005.
- [4] Burkhard Monien and Tobias Tscheuschner. On the power of nodes of degree four in the local max-cut problem. In *Proceedings of the 7th International Conference on Algorithms and Complexity*, CIAC'10, pages 264–275, Berlin, Heidelberg, 2010. Springer-Verlag.