

REFERENCES

- [1] C. Chekuri, R. Motwani, B. Natarajan, and C. Stein. Approximation techniques for average completion time scheduling. *SIAM Journal on Computing*, 31(1):146–166, 2001.
- [2] R. Dechter, I. Meiri, and J. Pearl. Temporal constraint networks. *Artificial Intelligence*, 49, 1991.
- [3] A. Farinelli, L. Iocchi, D. Nardi, and V. Ziparo. Assignment of dynamically perceived tasks by token passing in multirobot systems. *Proceedings of the IEEE*, 94(7):1271–1288, 2006.
- [4] A. Farinelli, A. Rogers, A. Petcu, and N. R. Jennings. Decentralised coordination of low-power embedded devices using the Max-Sum algorithm. In *Int'l Conf. on Autonomous Agents and Multi-Agent Systems*, pages 639–646, 2008.
- [5] H. Gehring and J. Homberger. A parallel hybrid evolutionary metaheuristic for the vehicle routing problem with time windows. In *Proceedings of EUROGEN99*, 1999.
- [6] M. Gombolay, R. Wilcox, and J. Shah. Fast scheduling of multi-robot teams with temporospatial constraints. In *Robotics: Science and Systems (RSS)*, 2013.
- [7] R. L. Graham. Bounds on multiprocessing timing anomalies. *SIAM Journal on Applied Mathematics*, 17(2), 1969.
- [8] I. Gurobi Optimization. Gurobi optimizer reference manual, 2014.
- [9] L. A. Hall, A. S. Schulz, D. B. Shmoys, and J. Wein. Scheduling to minimize average completion time: Offline and online approximation algorithms. *Mathematics of Operations Research*, 22(3), 1997.
- [10] E. G. Jones, M. B. Dias, and A. Stentz. Time-extended multi-robot coordination for domains with intra-path constraints. In *Robotics: Science and Systems (RSS)*, 2009.
- [11] R. Junges and A. L. C. Bazzan. Evaluating the performance of DCOP algorithms in a real world, dynamic problem. In *Int'l Conf. on Autonomous Agents and Multi-Agent Systems*, pages 599–606, 2008.
- [12] J. E. Kelley Jr. and M. R. Walker. Critical-path planning and scheduling. In *Proceedings of the Eastern Joint Computer Conference*, 1959.
- [13] S. Koenig, C. Tovey, M. Lagoudakis, V. Markakis, D. Kempe, P. Keskinocak, A. Kleywegt, A. Meyerson, and S. Jain. The power of sequential single-item auctions for agent coordination. In *Proc. AAAI Conf. on Artificial Intelligence*, 2006.
- [14] G. A. Korsah, A. Stentz, and M. B. Dias. A comprehensive taxonomy for multi-robot task allocation. *The International Journal of Robotics Research*, 32(12):1495–1512, 2013.
- [15] M. G. Lagoudakis, M. Berhault, S. Koenig, P. Keskinocak, and A. J. Kleywegt. Simple auctions with performance guarantees for multi-robot task allocation. In *Proc. IEEE/RSJ Int. Conf. on Intelligent Robots and Systems*, 2004.
- [16] M. G. Lagoudakis, E. Markakis, D. Kempe, P. Keskinocak, A. Kleywegt, S. Koenig, C. Tovey, A. Meyerson, and S. Jain. Auction-based multi-robot routing. In *Robotics: Science and Systems (RSS)*, 2005.
- [17] L. Luo, N. Chakraborty, and K. Sycara. Multi-robot assignment algorithm for tasks with set precedence constraints. In *Proc. IEEE Int'l Conf. on Robotics and Automation*, 2011.
- [18] K. S. Macarthur, R. Stranders, S. D. Ramchurn, and N. R. Jennings. A distributed anytime algorithm for dynamic task allocation in multi-agent systems. In *Proc. AAAI Conf. on Artificial Intelligence*, pages 701–706, 2011.
- [19] R. T. Maheswaran, M. Tambe, E. Bowring, J. P. Pearce, and P. Varakantham. Taking dcop to the real world: Efficient complete solutions for distributed multi-event scheduling. In *Int'l Conf. on Autonomous Agents and Multi-Agent Systems*, pages 310–317, 2004.
- [20] G. Melançon, I. Dutour, and M. Bousquet-Mélou. Random generation of directed acyclic graphs. *Electronic Notes in Discrete Mathematics*, 10, 2001.
- [21] E. Nunes and M. Gini. Multi-robot auctions for allocation of tasks with temporal constraints. In *Proc. AAAI Conf. on Artificial Intelligence*, 2015.
- [22] M. Queyranne and A. S. Schulz. Approximation bounds for a general class of precedence constrained parallel machine scheduling problems. *SIAM Journal on Computing*, 35(5), 2006.
- [23] S. Ramchurn, A. Farinelli, K. Macarthur, M. Polukarov, and N. Jennings. Decentralised coordination in RoboCup Rescue. *The Computer Journal*, 53(9):1–15, 2010.
- [24] S. Sariel, T. Balch, and N. Erdogan. Incremental multi-robot task selection for resource constrained and interrelated tasks. In *Proc. IEEE/RSJ Int. Conf. on Intelligent Robots and Systems*, pages 2314–2319, Oct 2007.
- [25] M. M. Solomon. Algorithms for the vehicle routing and scheduling problems with time window constraints. *Operations Research*, 35(2), 1987.
- [26] C. Tovey, M. Lagoudakis, S. Jain, and S. Koenig. The generation of bidding rules for auction-based robot coordination. In L. Parker, F. Schneider, and A. Schultz, editors, *Multi-Robot Systems. From Swarms to Intelligent Automata Volume III*, pages 3–14. Springer Netherlands, 2005.
- [27] Y. Xu, P. Scerri, B. Yu, S. Okamoto, M. Lewis, and K. Sycara. An integrated token-based algorithm for scalable coordination. In *Int'l Conf. on Autonomous Agents and Multi-Agent Systems*, pages 407–414, 2005.
- [28] X. Zheng, S. Koenig, and C. Tovey. Improving sequential single-item auctions. In *Proc. IEEE/RSJ Int. Conf. on Intelligent Robots and Systems*, 2006.