

SAT

bibliography list

Material on CDCL SAT algorithm can be found in many books and surveys, for example see the book by Kroening and Strichman [3]. The algorithm of Schönig is from [6]. The PPZ algorithm is in [5] and the PPSZ algorithm is from [4] (see also [7]). The currently fastest algorithm is PPSZ with analysis by Hertli [2]. The deterministic algorithms I presented are from [1].

References

- [1] E. Dantsin, A. Goerdt, E. A. Hirsch, R. Kannan, J. M. Kleinberg, C. H. Papadimitriou, P. Raghavan, and U. Schönig. A deterministic $(2-2/(k+1))^n$ algorithm for k-SAT based on local search. *Theor. Comput. Sci.*, 289(1):69–83, 2002.
- [2] T. Hertli. 3-SAT faster and simpler - unique-SAT bounds for PPSZ hold in general. *SIAM J. Comput.*, 43(2):718–729, 2014.
- [3] D. Kroening and O. Strichman. *Decision Procedures: An Algorithmic Point of View*. Springer Publishing Company, Incorporated, 1 edition, 2008.
- [4] R. Paturi, P. Pudlák, M. E. Saks, and F. Zane. An improved exponential-time algorithm for k-sat. *J. ACM*, 52(3):337–364, 2005.
- [5] R. Paturi, P. Pudlak, and F. Zane. Satisfiability coding lemma. In *Proceedings 38th Annual Symposium on Foundations of Computer Science*, pages 566–574, 1997.
- [6] U. Schönig. A probabilistic algorithm for k -sat based on limited local search and restart. *Algorithmica*, 32(4):615–623, 2002.
- [7] U. Schönig and J. Torán. *The Satisfiability Problem: Algorithms and Analyses*. Lehmanns Media, 2013.