

ParSAT: A Parallel DPLL SAT Solver

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For this project I propose the implementation of a parallel solver for the Boolean satisfiability problem. This solver will implement a serial version of the well-known DPLL¹ algorithm in Haskell as a baseline, and a parallel version to demonstrate performance gains with parallelism. For evaluation, I am going to use benchmark datasets from SATLIB². Additionally, if time permits, I will include an experimental study comparing the performance of my parallel solver to existing state of the art SAT solvers.

¹ [DPLL algorithm - Wikipedia](#)

² [SATLIB](#)