SAT/SMT Solving Sudoku Solving

Oussama Oulkaid December, 2021

This document is a description of the two Sudoku solvers built for this project. The first part details the Z3¹ theorem prover based solution. The second describes my own algorithm proposal.

Z3 based solver

TBD

My solver

The following is the algorithm.

Input: Sudoku problem Result: Sudoku solution

TBD

Algorithm 1: Backtracking algorithm based Sudoku solver

Comparison

TODO: express the downsides and upsides of my implementation. Have some graph to sythesize some benchmarking testing.

¹by Microsoft