

Laziness is next to Godliness

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May 29, 2014

Abstract

Solving combinatorial optimization problems is hard. There are many techniques which we need to combine to successfully solve these problems: including inference, search, relaxation, and decomposition. Any method to solve combinatorial optimization problems must tradeoff how much time to spend in search, and how much time to spend on methods to reduce the search. In this talk I will propose that we should spend the least amount of time possible on methods to reduce search, until there is evidence that it will be useful. I will demonstrate how this "laziness" principle can be highly effective in solving many combinatorial optimization problems.

keywords. Combinatorial optimisation, Constraint Solving, Clause Learning