

Abstract

Title:Incomplete Search Techniques

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Abstract:The constraint satisfaction problems is set of discrete combinatorial problems which address to solve many of the real life problems. They are commonly solved by inference and search algorithms. In most cases the complete search algorithm can find a solution to a problem, but in many cases, search space is too large to be explored completely. In these case the limitation of search space is necessary in a way which gives us some way to still find a solution without having to search whole search space. Discrepancy-based search algorithms limit the search space by limiting the number where search decisions go against the heuristic in given search. Incomplete algorithms don't guarantee finding a solution. Many incomplete algorithms have any-time property useful in optimization problems, where algorithm provides some solution at any time even if it is not an optimal one.

Keywords: *CSP, incomplete search, discrepancy search*