

Constraint Programming

Quiz #06 (higher-level consistencies)

Is $(k+1)$ -consistency strictly stronger than k -consistency?

What are the relations between k -consistency, strong k -consistency, and (i,j) -consistency?

Which level of consistency do we need to guarantee that a CSP has a solution?

What is a backtrack-free search?

Define the graph width.

Assume that we have a constraint network of width w . If we make this network $(w+1)$ -consistent, can we always solve the problem using backtrack-free search?

Assume that we have a constraint network of width w . If we make this network strongly $(w+1)$ -consistent, can we always solve the problem using backtrack-free search?

What is inverse consistency?

What is the relation between AC and inverse AC?

What is the relation between neighborhood inverse consistency and path inverse consistency?

What is the relation between singleton consistency and shallow backtracking?

Is singleton arc consistency strictly stronger than arc consistency?