

Constraint Programming

Quiz #05 (path consistency)

Does path consistency guarantee that every constraint between the variables on the path can be satisfied?

If a CSP is path consistent, does it always have a solution?

Do we need to verify every path in the constraint network to make the CSP path consistent?

Is path consistency strictly stronger than arc consistency?

Describe which paths need to be re-revised after making a path (i,k,j) consistent.

If the path (i,k,j) is verified, do we need to verify the path (j,k,i) ? Why?

What is the major problem of the PC-3 algorithm?

Formulate the notion of directional path consistency.

Is directional path consistency strictly stronger than arc consistency?

List the weaknesses of path consistency.

What is the major motivation behind restricted path-consistency.

Read carefully the RPC algorithm. Explain every modification of Q_{PC} in the procedure $PRUNE(Q_{AC}, Q_{PC})$.