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From local to global consistency in temporal constraint networks. (English) Zbl 0902.68016
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Summary: We study the problem of global consistency for several classes of quantitative temporal constraints which include inequalities, inequations and disjunctions of inequations. In all cases that we consider we identify the level of local consistency that is necessary and sufficient for achieving global consistency and present an algorithm which achieves this level. As a byproduct of our analysis, we also develop an interesting minimal network algorithm.

MSC:

68M99 Computer system organization

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Keywords:

global consistency; temporal constraints; network algorithm

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