论文

HEURISTIC SUPERVISION OF DISCRETE EVENT SYSTEMS

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摘要　　Results on supervisory control of discrete event processes are mainly concerned with designing a controller such that the closed loop system generates a language L which coincides with the target language.In this paper we consider supervisory control problem for a class of discrete event processes when the design target is that a certain set of language patterns can not occur in the closed loop language.A heuristic supervisor is constructed via the heuristic search method developed in AI. This scheme requires only the information about thecontrollability of the event symbol set. It is capable of designing a modular heuristic supervisor when there are many such forbidden strings. Effectiveness of such a supervisor is proved forsystems with perfect and partial observation.

关键词　　Discrete event systems, supervisory cont

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