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The Quotation-Based Algorithm for Distributed Decision Making

Authors: Gennady P. Ginkul, Sergey Yu. Soloviov

Abstract : The article proposes to use so-called "quotation-based algorithm" for simulation of decision making process in distributed expert systems and multi-agent systems. The idea was adopted from the techniques for group decision-making. It is based on the assumption that one expert system to perform its logical inference may use rules from another expert system. The application of the algorithm was demonstrated on the example in which the consolidated decision is the decision that requires minimal quotation.

Keywords: backward chaining inference, distributed expert systems, group decision making, multi-agent systems

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