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# Fuzzy Reasoning Based on Fuzzy Petri Nets

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**Abstract**

This paper presents a new algorithm for performing fuzzy reasoning based on fuzzy Petri nets. The algorithm essentially is a modification of the one we presented in [3]. Given the truth values of a set of propositions, the algorithm can evaluate the truth value of any proposition * efficiently and automatically. With this reasoning capability, we believe the computers might think more like people. The time complexity of the algorithm is *(cnm), where c is the number of truth values of proposition given by the user, n is the number of places, and m is the number of transitions.

*Keywords:* Expert System, Fuzzy Pertri Net, Fuzzy Production Rule, Fuzzy Reasoning, Knowledge Base, Rule-Based System, Sprouting Forest.