

Mathematical Approaches for Logic Modeling and Programming in Information Systems

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Abstract:

Logic modeling and logic programming are very important parts of developing information systems, especially for realizing inference engines in information systems. This talk presents a mathematical approach for selection of appropriate logic types (e.g. fuzzy logic, propositional logic, predicate logic, production rules, etc.) that can be used for realization of inference engine, satisfying the qualities like complete modeling, fast inference, compact code, and ease of implementation.

Keywords: Logic programming, logic modeling, mathematical logic