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Rule based modeling of knowledge bases Rule based construction of knowledge base models for automation/expert systems

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Abstract

It is critical to have a knowledge base model for efficient storage of extracted knowledge. This ensures that the knowledge is stored in a meaningful way to be used for different applications. The efficiency of the knowledge base model depends largely on the rules of construction. Knowledge represented using logico-linguistic techniques and semantic networks lack a consistent rule based knowledge model. The current paper deals with the analysis of text from the knowledge extraction, representation and semantic network phase to formulate rules which would lay foundations of a knowledge model. The developed rules seem to be promising providing a comprehensive coverage of different scenarios. The extensive coverage is an indication that the knowledge model will cater to the entire domain knowledge, thereby laying the foundations of automatic construction of efficient knowledge bases.

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