Abstract

A finite state automaton is conceptual graphs which are considered to be an important type of graph method. As a result of the expansion of using the graphs in the process of data mining, the use of FMS is still limited because of the difficulty in processing databases, therefore this paper is to find an approach that make it easier to deal with large groups of machines as a database is encourage to use of this type of representation in mining techniques. This paper gives a approach for finding a match between machines, which appear frequently in a single environment or similar environments, the approach consist of two methods one for machines matching as adjacency matrices and another method for matching machines as vectors of features ,hence prove that second method more efficient to control the match processing.

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**Index Terms**

Computer Science

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**Keywords**

Features, Finite State Automata, Data Reduction, Feature Extraction, Vector Feature.