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1 – An Affection Online system of concept based association rules mining

Methods:-

This paper presents a new text mining system for extracting association rules from online textual documents. It designed to extract association rules from online structured and unstructured documents based on concepts representation. Moreover, the developing of the mathematical formula of weighting schema caused a strong effect in developing the D-EART system . A new algorithm for generating association rules based on concepts (GARC) is used in the mining phase, and it employs a data structure of hash table to improve and speed up the mining process.

2 - A Text Mining Technique Using Association Rules Extraction

Methods:-

a new text mining system for extracting association rules from online textural documents is presented in this paper . The system is designed for association rules mining from unstructured documents based on words representation. It called Extracting Association Rules from Textural documents (EART) . The Mathematical formula of weighting schema is used for labeling the documents automatically. A new algorithm for Generating Association Rules based on words (GARW) is proposed to overcome the drawbacks of traditional algorithms.

3- Research name:

Mining Association Rules from Unstructured Documents

Methods:

This paper presents a system for discovering association rules from collections of unstructured documents. The system treats texts only not images or figures. The system discovers association rules amongst keywords labeling the collection of textual documents. The main characteristic of the system is that the system integrates XML technology (to transform unstructured documents into structured documents) with Information Retrieval scheme(TF- IDF) and Data Mining technique for association rules extraction. It depends on word feature to extract association rules. Our work depends on the analysis of the keywords in the extracted association rules through the co- occurrence of the kewwords in the extracted association rules through the co-occurrence of the keywords in our sentence in the original text and the existing of the keywords in one sentence without co-occurrenc.

Experiments applied on a collection of scientific documents selected from MEDLINE that are related to the outbreak of H5N1 avian influenza virus

4- Fast Dynamic Algorithm for sequence Alignment based on bioinformatics :

<u>Methods</u> :-

This paper presents a new implemented algorithm for sequence alignment based on bioinformatics algorithms. The implemented algorithm is called fast dynamic algorithm for sequence alignment. This implemented algorithm based on making a matrix of M x N (M is the length of the first sequence, N is the length of the second sequence), After that filling the three main diagonal without filling the unused data and the same time get the optimal solution; so that the execution time is decreased, the performance is high and the memory location decreased. The experiments in this paper are made a comparison between the two dynamic algorithms Needleman-wunsch, smith waterman and our algorithm. The results show that our algorithm decreased the execution time when compared with Needleman – Wunsch and smith-waterman algorithms.

5- Research Name:

Fast Dynamic Algorithm for sequence Alignment Based on Bioinformatics.

<u>Methods</u>:

This paper presents a new algorithm for DNA sequence alignment based on concepts from bioinformatics dynamic algorithms. A new algorithm is proposed for overcoming the problems of dynamic algorithms; the memory spaces and performance. The experiments are applied on a collection of DNA sequences to compare the new algorithms results. The performance of proposed algorithm is compared with previous dynamic algorithms