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Semantic Content Extraction Based On Homomorphic Methodology

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Abstract

Semantic contents are nothing but the object, event and concept instances that is present in the video. The problem is that the semantic contents cannot be easily extracted. The key issue in extracting the semantic content is its representation. In order to expand the modeling capabilities additional rules can be used. The goal of this paper is to allow the users to retrieve some useful information from large amount of data in a semantically meaningful manner. When the keyframes are being extracted from the video there is a problem of repeated frames. In order to avoid this problem homomorphic methodology is used, which makes the system wide domain applicable.

Keywords: Semantic content, Spatial relation, Modeling, Event, Raw data, Keyframes.

Introduction

To model and extract the video content became a must because of the increase in the available amount of video. The video content consists of three levels. The first level consists of raw video data, the second level consists of low-level features and the third level consists of the semantic content. The semantic content extraction seems to be very difficult because video is an arrangement of frames in a order and there is no direct relation with the semantic content. The manual extraction process will be more time consuming and tedious. The querying capabilities will be limited in-case of the manual extraction process.

Since in each video the keyframes has to be extracted it leads to a more time consuming arena. When the keyframes are being extracted it should be stored in a location that should not be subjected to any crash or in other words the keyframes must be stored in a separate domain. An ontology construction can be made by collecting all the significant videos together. This makes the search easier. The videos which are clustered together are given some additional parameters or tags to make the search much more accurate.

The Video Database System [1] have both the semantic query facilities and spatio-temporal facilities. The rule-based model is a popular technique that is used to handle the complex situation such as the representation problem. A rule-based system that makes use of knowledge-base is used in order to provide full support for spatio-temporal and

similarity-based object-trajectory queries. Here the video clips are segmented into frames of shots with respect to the spatial relationship that is existing between the objects in the video frames. This rule-based approach to model spatial-temporal relation removes the need for computation of relation during the period of query processing which reduces the response time of the queries. Here the handling of semantic part is done by the object-relational database. The number of facts that need to be stored can be reduced by the usage of set of rules in the knowledge-base.

Methodology

The rule-based model is nothing but a modeling approach in which a set of rules will implies a model. By using those rule set a model can be formed. Video Semantic Content Model (VISCOM) is a metaontology that provides a independent rule construction standard. In order to speed up the extraction process and to handle some special situation there is a possibility to give additional rule definitions.

Script to Movie

The spectrum of scripting languages ranges from very small and highly domain-specific languages to general-purpose programming languages used for scripting and the scripting takes a considerable amount of time. Python is a general-purpose language that is also commonly used as an

extension language which is present in the new stage of language. The Lisp and the Applications are examples of scripting language dialects of general-purpose languages.

Working

Each and every or MM resource which is uploaded by the admin for the current application have unique name. That separate unique name for the separate resource which is created by the application admin for identification of the resources. The identification have criteria this specifies the name and path. Each identity has certain path.

In this module is the most importance process for the current application. In this application we have one text field like real time search engine operation (SEO). By using the text field the application get the user input or query. In this process must required by user input else request is arrested by validating script. The user must enter the reasonable query for the application. By using that query we are make a perfect match of the resource identity. Dependent up on the user query or script the datas in the retrieval. The user suppose given the single identity means single resource will be retrieve and the user give multi script means multiple resource will be retrieve by the application by the database server.

Homomorphic encryption is a form of encryption which allows specific types of computations to be carried out on ciphertext in order to make the working more prior and obtain an encrypted result which decrypted matches the result of operations performed on the plaintext. For instance, one person could add two encrypted numbers and then another person could decrypt the result, without either of them being able to find the value of the individual numbers that is to preserve the independence of both the parties.

Conclusion

The purpose of this paper is to give a basic idea of video computation. Additional rules can be added in the case of rule-based modeling which gives a credit to this approach. There are number of irregular situations that is not possible for representation which are defined in the ontology and the usage of homomorphic technique paves way for wide domain applicability. The VISCOM is enriched with the additional rule definitions. The additional rules can be used in any part of the system and it can also be used along with the main program. The main usage of rule-based modeling is the ability to handle the complex situations.

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