

International Journal of Computer Science and Mobile Computing



A Monthly Journal of Computer Science and Information Technology

ISSN 2320-088X

IMPACT FACTOR: 6.017

IJCSMC, Vol. 6, Issue. 11, November 2017, pg.70 – 73

Survey on Web Video Semantic Analysis

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Abstract:- *The semantic video analysis and retrieval process are based on the shapes, texture, color, for the Classification purpose. The video retrieval concept is more efficient and effective. They are summarized on the visualization and interaction. The video library function is provided on the Web application program. The JSON based java script is used to collect the data from web. The screen selection and object recognition are used to annotate the Low level of feature of a video can hardly under the semantic concept the video annotation problem are mainly occurs due to the semantic gap. The match making technique is used to screen the video formatted method. The video get compared using the same level feature are screened. By the colour and texture level OWL file get created using the modelling tool. By protégé. Protégé are used as the pluggable functionalities and services the protégé are supported on the W3C recommendation. The standard language is encouraged and split using the models are ranked on the analysis method. The rankings models are used to describe the video classification Method.*

Keywords: *Semantic analysis, RDF XML, OWL, Protege.*

I. INTRODUCTION

Video makes the user's view in more realistic manner with less effort. Generally, video is the combination of text, image, and video. The number of users searching video over the web is increasing. Video semantic analysis enhances the applications with rich content and use of video tools making the communication more effective. So, video retrieval is desirable for most of the web users. Even effective retrieval of video in "World Wide Web" is still average. The end user can retrieve the video data very effectively based on the depth knowledge of the video representation with well-defined structure [1]

In Semantic Web, the retrieved information has a well-defined meaning. It enables people to create data stores on the web, build vocabularies and write rules for handling data. Semantic web aims to present web data that it is understood by machines to do aggregating and searching the information in web without human operator. It adds meta-data to the existing

documents for extending those documents into well defined information. This extension enables the web to be processed automatically by machines and used by humans [1].

The traditional approach of user given query the video has been retrieve. Semantic video retrieval based on Video feature extraction techniques are applied color, texture, shape. The video retrieval takes more labor involved for this application [3] Semantic annotation, indexing and retrieval of video. We incorporate web-casting text analysis, broadcast video analysis, and text/video alignment to extract event semantics and detect events, which are important components for video annotation, indexing, and retrieval. In particular, we believe our approach can be extended to all domains [4].

II. METHODOLOGY

Video retrieval system system based on ontologies and semantic concept classifiers. Using Word Net, the semantic linguistic relations between the concepts is determined for defining the ontology schema. Then the concept detectors are linked to the corresponding concepts in ontology.

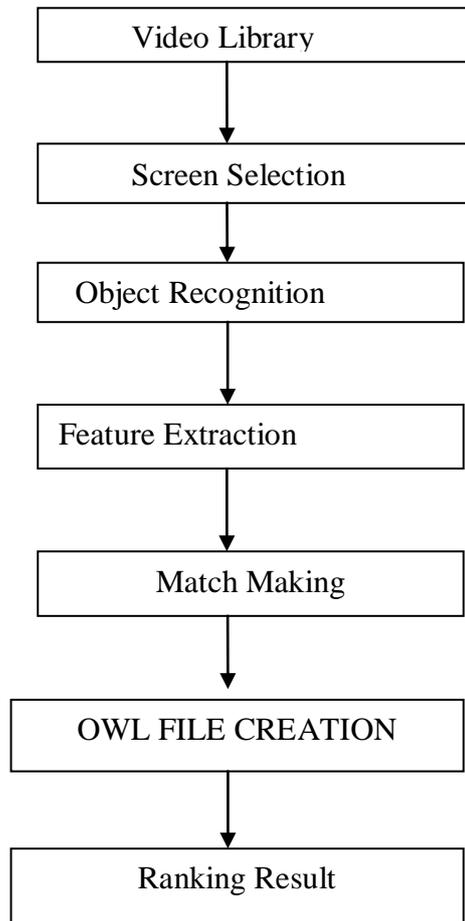


Fig 1. Process Flow

The rules defined in Semantic Web Rules Language (SWRL) automatically, learn the knowledge embedded in the ontology.

A. Video Library

This video library used to collect from World Wide Web. This video library contains millions of video. This video contains contents and objects. Video library downloaded using json parser.

Example: <https://www.youtube.com/watch?v=Fk1INY4gNk0>

B. Screen Selection

Video can be divided into Screen. Screen size based on video.

C. Object Recognition

The video files annotated by a large number of tags in video library. So, text-based video retrieval users may face difficulties to find the exact video. Content-based video retrieval is used to find the videos efficiently for users. In this method, low-level visual feature extraction, shot detection and object recognition are the most important phases.

D. Feature Extraction

The semantic video analysis and retrieval process are used as the active research field. Semantic image retrieval based on the shapes, textures, color, for the classification purpose. The image retrieval concept is more efficient and effective.

E. Owl File Creation

Protégé-2000 is a very popular knowledge modeling tool developed at Stanford University. Ontologies and knowledge-bases can be edited interactively within Protégé and accessed with a graphical user interface and Java API. Protégé can be extended with pluggable Components to add new functionalities and services. There exists an increasing number of plug-in offering a variety of additional features, such as extra ontology management tools, Multimedia support, querying and reasoning engines, problem solving methods, etc. Protégé Implements a rich set of knowledge-modeling structures and actions that support the creation, Visualization and manipulation of ontologies in various representation formats. Protégé gives Support for building the ontologies that are frame-based, in accordance with the Open Knowledge Base Connectivity protocol (OKBC). The extended version of frame based system was introduced in 2003 to support OWL with an advantage of semantic web version. There are various forms such as RDF(s), OWL and XML Schema in which protégé ontology can be exported. The following are various plunging available in protégé. It is a tool developed by protégé using indented list method. The protégé class browser consists in its simplicity of representation, and also familiarity to the user. Secondly it offers a clear view of all the class names and their hierarchy.

F. Ranking Result

The result get performed and analyzed by the protégé .the ranking performs better.

III. CONCLUSION

The effective video mechanisms are used as the ontology polarity reviews the level. The object recognition and OWL file are extracted using ontology based system using video retrieval method.

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