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A Review on Semantics Web Technology

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***Abstract*—** Day by day the population index is growing radically. With this growth the average user of World Wide Web are increasing and the data volume also increases at a higher rate. Semantics is one of the technology to handle the large volume of data and to filter out the used volume for consumption. Semantic web is the web of semantics where meaningful information are warehoused in the form of RDF/XML, Triples, and SPARQL etc. Ontology is the one of the pillar of semantics data. In this paper our goal is to study the existing semantic technology in W3.

***Keywords*—**Semantic, Web, Resource Description Frame, SPARQL, World Wide Web.

I. INTRODUCTION

Nowadays text corpus of a concept is very enormous. Every information linked to the corpus is important for good result. Different author have different perspective for a concept. As the information is growing drastically on World Wide Web the extraction or retrieval of information is the challenging task [3]. Personalization of the web is one of the solution to solve the problem of information extraction [11]. In era of modern technologies like internet of things, cloud computing, big data etc. millions of user are connected to the internet across world and every user want to access the information over World Wide Web securely. Every technology has its own model to store the data on internet. The fast increase of web capabilities give birth to new challenges and opportunity to semantics. Ontology plays important role in semantics. It is a collection of semantic data organized in hierarchical way to store the data in form of classes, subclasses, relation and their properties.

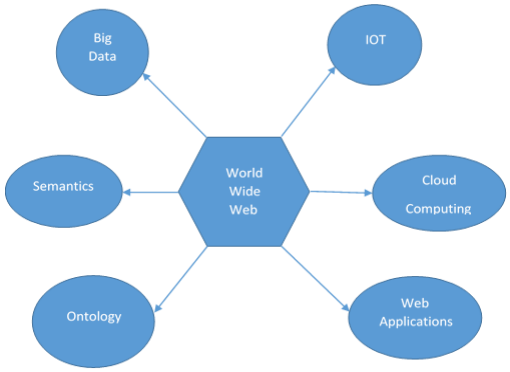

Figure 1 W3 Model with New Technology

II. LITERATURE SURVEY

Author	Year	Proposed Work
Edgard Costa et. al.[1]	2017	Proposed a novel approach to construct, design and model ontology based news authoring environment and content management system in semantic web using Zika ontology**.**
Fatmah Bamashmoos et. al.[2]	2017	Presented the effect of SPARUL attack on semantic web and how to prevent from this security attack while using the development language as PHP
C. Ramesh et. al.[3]	2017	Proposed the web mining model using ontology to retrieve the information on world wide web in semantic form. Also present the sequential pattern mining procedure on web browsing log files.
A. Mazayev et. al.[4]	2017	Presented the web of things models and their properties to standardize the API's of internet of thing
Olga Nabuco et. al.[5]	2017	Discussed the new semantic technologies and application of semantics like information sharing, services and support for new web.

Randa Hammami et. Al.[6]	2017	Present the new tool R-matcher to measure the semantic similarity/relatedness using owl-s and test the performance in terms of precision, recall, average query response time. It is a java base application which uses JDOM API, Word Net, WS4J
D Venkataraman et. al.[7]	2017	Presented the layered architecture of semantic web, discuss the procedure to construct the ontology for institution, resource tracking from constructed ontology and the execution of SPARQL query using protégé tool.
Xi Chen et. al.[8]	2017	Proposed the SPARQL extension method to improve the quality of response and data flow in multipath semantic services using k-SPARQL algorithm.
Salih Ismail et. al.[9]	2017	Discussed various frame format to represent semantic data, semantic similarity, and SPARQL query expansion methods.
R. Sethuraman et al.[10]	2017	In this resource description format is used to store the semantic concepts for medical information in health care field. The various service request agent and service provider agents are expanded in semantic service network.
Jaehak Yu et. al.[12]	2018	Presented the internet of everything and internet of thing in semantic web. Also discussed the model architecture of ontology in semantic web for information retrieval in two modules one with sensor unit which is used to convert the sense signal into semantic web standard formats, second is the semantic processor used to store the observation in standard units of semantics sensor.
Wattana Viriyasitavat et. al.[13]	2019	In this the author presented the semantics service specification framework and languages to fulfill the requirements of automated system and their algebraic properties to test them.
Kabul Kurniawan et. al.[16]	2018	In this author discussed the various semantic services and their role in web technology. Also the web ontology language in service description, AI planning and automatic service discovery.
Bing Jia et. al.[17]	2018	Presented the discovery of location using location based service like mobile location description, ontology description etc. OWL- Service is used to detect the location in the network with the predefined rules.
Sunny Sharma et. al.[18]	2017	Proposed a new framework to retrieve the information using ontology in semantic web. Sematic mining with ontology structures a new approach for the web technology.
Lokesh B Bhajantri et. al.[19	2017	Presented the semantic sensor network and ontologies. It is a emerging area of research work. The semantic web service is introduced in the sensor network. The data provided to the user will be semantic except the raw data generated by the wireless sensor network.
Mrinal Pandey et. al.[20]	2017	Presented the university ontology with Manchester owl. Manchester OWL sentence structure is a w3c.org reference that helps in arranging and representation of Ontologies.
C S Saravana Kumar et. al.[21]	2017	A novel method where a "T" constructed Semantic building is sustained for each training sentence where the relationship of each word in the training sentence is recognized in the form of cosine similarity mass and also connection towards the probable terms of the same words are established with masses.
Abhishek Kumbhar et. al.[22]	2019	Presented the keyword based extraction and their performance analysis using five larger data set of amazon, stack exchange, TMDB and various other data sets. Evaluation is done by supervised and unsupervised learning parameters.
Mohammed Nadher Abdo Al. et. al.[23]	2019	Presented the language modelling in semantic web. Named identity recognition in natural language processing. Author focused on the Arabic language and semantic actions.

III. CONCLUSION AND FUTURE SCOPE

In this paper a survey of semantic approaches is presented. It is found that due to emerging of new technologies the information retrieval mechanism should be as fast as the new models. It is needed that the more robust technique is required to setup the communication link between concepts and models.

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