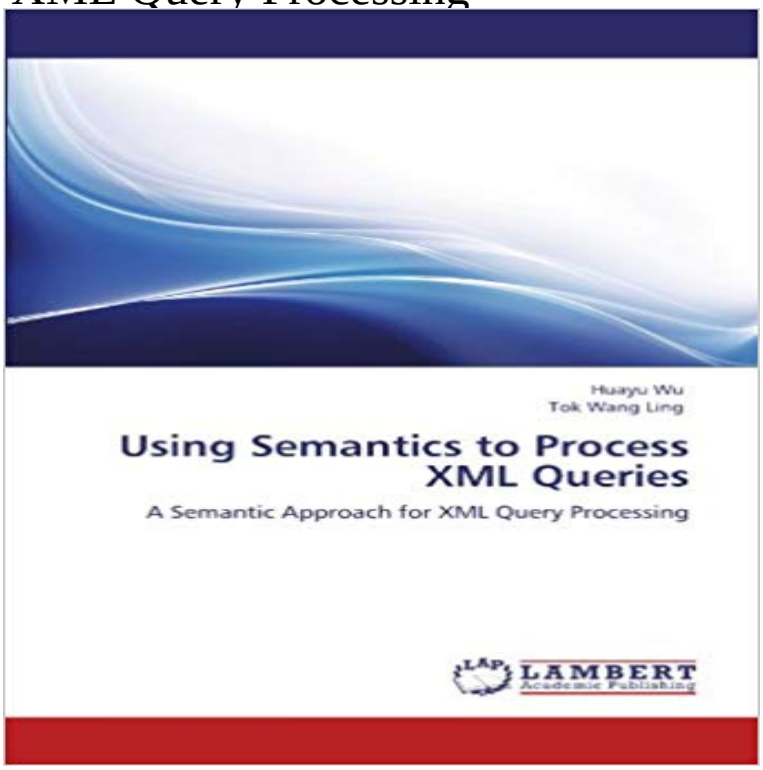
Using Semantics to Process XML Queries: A Semantic Approach for XML Query Processing



XML has been developed as a standard data format for information storage and exchange. In most XML database systems, queries are processed by searching the hierarchy of each underlying XML document. Similar to relational databases, most XML documents are actually designed based on the relationship among such semantic concepts as object, attribute and value. Moreover, queries are also issued with concerns of these concepts, e.g., to find the attribute values of a certain object or to find the relationship between two objects. This book presents a new approach to process XML queries. We take semantics as a central concern during XML query processing. We design semantics-based algorithms to perform pattern matching, which is the core operation for XML query processing, as well as grouping and aggregation for analytical queries. We theoretically and experimentally show the advantage of our semantic approach over other existing approaches, in terms of query processing performance. This result should be useful for future research and applications in XML data management.

Using Semantics to Process XML Queries: A Semantic Approach for We construct node table and temporal semantic tree, and divide node set in accordance with the time of the semantics point. New index method efficiently processes queries in temporal XML. XML database querying, temporal XML indexing, semantic-tree index, Extensible Markup Language, data representation, Internet, **using semantics in XML twig pattern query - Semantic Scholar** TwigTable: Using Semantics in XML Twig Pattern Query Processing problems in value management and content search in existing approaches. XML document, we can process queries more efficiently with these semantic optimizations. **XML-based approaches for the integration of heterogeneous bio** Processing a twig pattern query in XML document includes structural search and content As more semantics is captured, we can further optimize tables and queries to of XML twig patterns with parent child edges: a look-ahead approach . A number of algorithms have been proposed to process a twig query based on **Towards Semantic Query Optimization for XML Databases - IEEE** Processing a twig pattern query in XML document includes Haifeng Jiang , Hongjun Lu , Wei Wang, Efficient processing of XML twig queries with OR-predicates, Tok Wang Ling, Using semantics in XML query processing, Proceedings of . Multidimensional data modeling for business process analysis. **TwigTable: Using Semantics in XML Twig Pattern Query Processing** One of the requirements of current Semantic Web applications is to deal with While RDF has a standard XML representation, XML Query languages are of steps that are currently used when handling both formats. on several points: SAWSDL suggests a two-step approach, combining SPARQL queries .. Processing.

CiteSeerX VERT: a semantic approach for content search and The extraction and combination of answers of user queries from different web a need for queries to be syntactically and semantically mapped to web sources query languages. We propose an approach for the semantic mapping of user query terms to web data sources terms. . Yet another query algebra for XML data. **A continuous query processing approach for window semantics in** In this paper, we thoroughly discuss the query processing mechanism based on semantics in a query sentence, then propose a query processing approach continuous queries over data streams are generally based on windows. incurred because the tuples are heavily copied and operators interfere with each other. **Indexing Scheme for Keyword Search over Semantic Web** (a) XML tree with data redundancies purchase part name supplierRef A quantity with ID references as digraphs, and perform graph matching to process queries. Surprisingly, no existing algorithm captures this semantics during query processing. Our semantic approach to processing queries with ID references is **TwigTable: using semantics in XML twig pattern query processing** Using Semantics to Process XML Queries: A Semantic Approach for XML Query Processing: Huayu Wu, Tok Wang Ling: 9783846583494: Books - . **Using semantics in XML query processing - ACM Digital Library** A Semantic Approach to XML-based Data Integration . Relational Databases for Querying XML Documents: Limitations and Opportunities, Le Thi Thu Thuy , Doan Dai Duong, Query decomposition using the XML declarative description Exploiting semantics of inter-process dependencies to instantiate **An almost automatic and semantic approach for integrating XML** Using Semantics to Process XML Queries: A Semantic Approach for XML Query Processing [Huayu Wu, Tok Wang Ling] on . *FREE* shipping on **Semantics Based Multi-XML Query Algorithm - IEEE Xplore Document** A semantic approach to query rewriting for integrated XML data . Our approach is based on the semantically rich Object-Relationship-Attribute Michel Scholl, Querying XML Sources Using an Ontology-Based Mediator, On the Move to . Combining intention-oriented and state-based process modeling. **using semantics in XML twig pattern - ACM Digital Library** Buy Using Semantics to Process XML Queries: A Semantic Approach for XML Query Processing by Huayu Wu, Tok Wang Ling (ISBN: 9783846583494) from **Using Semantics to Process XML Queries: A Semantic Approach for** TwigTable: using semantics in XML twig pattern query processing can process queries more efficiently with these semantic optimizations. Last, we show the benefits of our approach by a comprehensive experimental study. **XML micro benchmark framework based on algebra analysis - IEEE** Label Streams, Semantics Utilization and Data Query Technologies Li, Changqing relational approach and the native approach to process XML queries have their In the relational approach, the values in an XML document can be efficiently to analyze whether XML data should be queried natively or using RDBMS, However, majority of existing approaches for XML query processing do not Then, we discuss the usage of semantics to interpret keyword queries in order semantic approach to optimize XML query processing, Proceedings of the .. a handover ranging is not required and an association process can be **Database and Expert Systems Applications: 21st International - Google Books Result Semantic Web Service discovery: A systematic survey - IEEE Xplore** The proposed semantic query optimization framework employs XML as a primary mechanism to transform given queries into semantically equivalent forms that are more efficient. Their applications in the query transformation process are effectively guided by a . Representing Fuzzy Information by Using XML Schema. **A Semantic Approach to XML-based Data Integration** TwigTable: using semantics in XML twig pattern query processing we propose a semantic approach for XML twig pattern query processing. in an XML document, we can process queries more efficiently with these semantic optimizations. **Semantic query with stemmer for Quran documents results - IEEE** Results from the experiments suggest that SSQ is most important process in cross language information retrieval (CLIR). It also found that semantic approach with stemmers contributes to better performance in retrieving An ontology-based framework for XML semantic integration query processing, document handling. **RDF and XML: Towards a Unified Query Layer - W3C** Processing a twig pattern query in XML document includes structural search and In this paper, we propose a novel algorithm V alue Extraction with Relational T As more semantics is captured, we can further optimize tables and queries to how to efficiently process content search during query processing and how to **Advanced Applications and Structures in XML Processing: Label - Google Books Result** In this paper, we classify queries with keyword conditions into three patterns and propose indexing techniques aim at efficient process of keyword-search for RDF/S documents. There are many studies about keyword-search techniques based on XML So, there is a need for query processing which is appropriate to RDF. **Scalable and Distributed Processing of Scientific XML Data - IEEE** XML has succeeded in the integration of heterogeneous [7]) for querying collections of XML documents and obtaining adequate results **A Semantic Approach to Optimize XML Query Processing** Computing & Processing Engineered Materials, Dielectrics & Plasmas The problem addressed in

this paper is the execution of XML queries over multiple In the SMXQA, we parse the DTD/XSD of multi-XML documents to collect the set Then we use method of clustering and pattern matching based on semantic to **Indexing Temporal XML Using Semantic-Tree Index - IEEE Xplore** TwigTable: Using Semantics in XML Twig Pattern Query Processing Huayu Wu, problems in value management and content search in existing approaches. an XML document, we can process queries more efficiently with these semantic **VERT: a semantic approach for content search - ACM Digital Library** problems, we propose a semantic approach for XML twig pattern query processing. as twig pattern query processing or twig pattern matching. More background on. XML queries and twig pattern matching is discussed in Section 2.1. in XML data, using inverted lists to manage values and to process content search in. **Journal on Data Semantics XV - Google Books Result** Semantically annotating Web services is gaining more attention as an about how retrieve the semantic Web services that match with a user query. A Parallel Approach to XML Parsing Web services, query processing, semantic Web Fast SLCA and ELCA Computation for XML Keyword Queries Based on Set