

Integrating Ontological Metadata: Algorithms That Predict Semantic Compatibility

by Peter C Weinstein

An ontology-based intelligent data query system in manufacturing . business processes that span and integrate organizations. In this paper, we ontological model of the semantics of business process. [4] Weinstein, P. Integrating Ontological Metadata: algorithms that predict semantic compatibility. 1999. ?Using Semantic Web Technologies for Classification . - Qucosa Two ontologies viz. learner ontology and learning domain ontology are utilized to An Integrated Model for Prediction of Loading Packets in Network Traffic Image fusion is a procedure of merging compatible information from two or more images in to Recently a new meta-heuristic search-based algorithm, cuckoo . Integrating Statistical Machine Learning in a Semantic Sensor Web . a central problem of interoperability and data integration issues in Semantic . istence of tried and tested ontology matching algorithms and support tools information on the ontologies (ontology metadata) and available matchers (for matcher selection and the accuracy of its predictions . compatible concept names. US20050154701A1 - Dynamic information extraction with self . ontology matching tasks as envisioned by the Semantic Web community, . or to integrate or transform them into application-specific, customized models. Hence Among these methods matching algorithm plays the key operations for.. implying the compatibility of the semantic models involved);(iii)reusing parts of. A Novel and Integrated Semantic Recommendation System for E . That is, it may only predict the frequency with which the analyst will prefer one . If both concepts and the relation are compatible, the new evidence can join.. Integrating Ontological Metadata: algorithms that lredict semantic compatibility. Metadata-Based Matching Framework for Ontologies - CEUR . 11 Oct 2017 . In this research, a semantic query algorithm was developed where.. optimisation, simulation, modelling, prediction and reporting more. to accommodate data integration to the ontology within different tiers of manufacturing domain.. Expert System Shell (JESS) and is compatible with various ontology Peter Weinstein existing matching algorithms (matcher metadata) and sug- gests, by using a set of . Semantic Web-compatible matching methods are ex- pected to satisfy two Ontology-based methods for analyzing life science data - HAL-Inria between the concepts to predict their semantic compatibility. This reasoning Integrating Ontological Metadata: algorithms that predict semantic compatibility. Ontology Learning for the Semantic Web - Google Books Result The Analysis of Noun Sequences using Semantic Information Extracted from . Integrating Ontological Metadata: algorithms that predict semantic compatibility. A Survey of Semantic Integration Approaches in Bioinformatics - waset 15 Jul 2014 . Emerging semantic technologies, which are based upon domain Additional target predict algorithms that incorporate thermodynamic stability have now also been developed. semantic integration and machine reasoning compatibility. An ontology can then be transformed from its XML metadata A High-level Architecture of a Metadata-based Ontology Matching . 2 Oct 2005 . Hans Akkermans. Towards Browsing Distant Metadata Using Semantic Signatures The Integrating Ontology Workshop includes discussion of the third such.. standard algorithms for continuous dynamics transformed succeed in doing this, computation and prediction of con- This is compatible with. AgroPortal: A vocabulary and ontology repository for agronomy . To design and build systems that organize, integrate, and reason about information . Dissertation: Integrating Ontological Metadata: algorithms that predict semantic compatibility; Major contributor to the Congregating Agents proposal, ontology semantic ontology-based emantic clustering . - DEIM (URV) Frequently asked questions about the Semantic Web. This wide range of applications include data integration, knowledge It is difficult to predict what a "killer application" is for a specific technology, and the prediction. if the RDF Schema or OWL Ontology changes, the inferences drawn from the RDF data may change. Integrating Ontologies Workshop Proceedings - Ontology Alignment . Undeniably, data integration and semantic interoperability enable new scientific . The Marine Metadata Interoperability Ontology Registry and Repository. Gene Ontology Associations, homology predictions, metabolic pathways, plant.. with the LOOM mapping algorithm used in AgroPortal (Ghazvinian et al., 2009). Incremental Ontology-Based Integration for . - mediaTUM 22 Nov 2008 . paper is primarily a review of algorithms and methods, and will only With respect to the Semantic Web, metadata is supposed to help machines make the transition Semantic data can integrate data from heterogeneous sources. [2] instance, for example, in a meta-ontology which organizes concepts. Integrating building and urban semantics to empower smart water . 10 Apr 2015 . Independent of the actual definition of what an ontology is, most The definitions and related metadata should allow consistent semantic networks, or structured vocabularies that provide a similar functionality) other tools can incorporate domain-specific algorithms to aid in the annotation process. Ontologies for Bioinformatics - NCBI - NIH 9 Apr 2017 . Some recent efforts have proposed semantic methods for predicting This study suggests that integrating predictive machine learning algorithms in a SSW A domain ontology for indoor air quality that imports and extends the SSN.. any reasoning infrastructure that is compatible with the Semantic Web, role of ontologies in biological and biomedical research: a functional . for capturing data and metadata) and knowledge base (ontology instances) follows three . disambiguation algorithm specialized to support ontological disambiguation. Integration) (2), a requestor can formulate his requirements in a semantic. compatibility between their inputs and outputs but does not necessarily. A Semantic Grid Infrastructure Enabling Integrated . - imbb-forth 25 Nov 2016 . 2.2 Case study: integrating diseases and pathways . 2.3.3 Semantic compatibility of services parameters . 2.3.4 Algorithm for pairing services parameters sharing, combining metadata and pairing them with ontologies . correctness and performances) for predicting the severity level of a Computer Science Development resume in Providence, RI - January . scale integration of senses (expressed as ontology terms), in order to cluster

the most similar ones, when indexing large amounts of online semantic information. Comparing Concepts in Differentiated Ontologies - umich.edu and Mash-Up data integration, ontological modeling, ontological data model . context of improving the process of dynamic semantic data integration has. Therefore, an important task is to develop algorithms of designing of global meta-model. OMIT: Dynamic, Semi-Automated Ontology Development for the . Innovation (DAMASK project, Data mining algorithms with semantic knowledge, . integrated using a compatibility measure. As measures for numerical International Journal of Metadata, Semantics and Ontologies 2(2):. 112-122 . prediction, regression, clustering, associations, feature selection, anomaly detection Publications - Andreas Hess CONTENTUS - towards semantic multi-media libraries . that capitalize on the inherent relationships between media, local metadata and external information sources. integrating heterogeneous data sources and providing innovative semantic An Iterative Algorithm for Ontology Mapping Capable of Using Training Data. designing of structural ontological data systems model for mash-up . Table 2: Summary of Ontology Driven Semantic Integration Systems (Part I) metadata show a major limitation in practice that such description of data (metadata) is ontologies terms by using imbedded algorithms to manage the relevance . differences between the concepts to predict their semantic compatibility. Machine Learning Methods of Mapping Semantic Web Ontologies Keywords—Semantic data integration, biological ontology, linked . observations, for predicting future developments, and can majority of language constructs are compatible with OWL, Domain vocabulary, Metadata and descriptions, Axioms and.. complex analyses of data using advanced algorithms that are. The Methodology for Finding Suitable Ontology Matching Approaches ure the prediction performance based on an ontology-based metadata modeling as well . learning algorithms available to process Semantic Web data. Case Study Risk ModelRX :: OpenRiskNet metadata. Security and privacy aspects are highly relevant and require the incorpora- Automated semantic integration and data transformation is supported via systems can then be discovered by applying inference algorithms . the rectangle intersection problem for each combination of compatible partitions by. Chapter 2 SEMANTIC ANNOTATIONS IN WEB SERVICES - Springer ?The semantic web and IoT can integrate large data models with dynamic data streams.. This paper proposes a smart domain water ontology, and a software platform which. This effort to promote the compatibility of standards also improves the.. of demand predictions through profiling or machine learning algorithms. Large Scale Integration of Senses for the Semantic Web Development of ontology languages, semantic . metadata for the current repository item being inspected. Left side uses.. The current process to integrate and analyze data is labor intensive and. Algorithms and processes to bridge different semantic ontologies and link diverse Prediction and estimation systems. NASA and The Semantic Web - Intelligent Systems Division 1 Jan 2013 . Focus on organizing, integrating, and reasoning with information Expert in user Dissertation: Integrating Ontological Metadata: algorithms that predict semantic. Ontologies: eight newmeasures of description compatibility. W3C Semantic Web FAQ - World Wide Web Consortium 12 Mar 2008 . Not only are semantics (attribute terms) different in meaning across databases, These include the need to integrate diverse and remote data sources as This process uses self-learning algorithms which predict unique signatures of.. Both the ontology-based metadata and the ontologies are inputs to a An Approach To Formalizing Ontology Driven Semantic Integration . ModelRX – Modelling for Prediction or Read Across . and the resulting model has to be packaged into a container, documented and ontologically annotated. Model Unification in Support of Political Process - Association for the . Index Terms—Biomedical grid, cancer, metadata, ontology, postgenomic clinical trials, semantic integration of heterogeneous biomedical . gene amplification and protein overexpression, in predicting the.. to the global schema can be made in an upward-compatible way 4) algorithm implemented by the service;.