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Titolo	Conceptual structures : standards and practices : 7th International Conference on Conceptual Structures, ICCS'99, Blacksburg, VA, USA, July 12-15, 1999, proceedings / / William Tepfenhart, Walling Cyre (editors)
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Edizione	[1st ed. 1999.]
Descrizione fisica	1 online resource (529 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 1640
Disciplina	003.54
Soggetti	Conceptual structures (Information theory) Graph theory Logic diagrams
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talk -- Conceptual Graphs: Draft Proposed American National Standard -- CG Modeling -- Constraints on Processes: Essential Elements for the Validation and Execution of Processes -- User Modelling as an Application of Actors -- Spatial Universals as the Human Spatial Notion -- Knowledge Engineering with Semantic and Transfer Links -- Understanding Natural Language -- A Peircean Framework of Syntactic Structure -- A CG-Based Behavior Extraction System -- Extending the Conceptual Graph Approach to Represent Evaluative Attitudes in Discourse -- Implementing a Semantic Lexicon -- Analysis of Task-Oriented Conversations into Conceptual Graph Structures -- Using Conceptual Graphs as a Common Representation for Data and Configuration in an Active Image Processing System -- Applications -- A Software System for Learning Peircean Graphs -- Synergy : A Conceptual Graph Activation-Based Language -- On Developing Case-Based Tutorial Systems with Conceptual Graphs -- Embedding Knowledge in Web Documents: CGs versus XML-based

Metadata Languages -- Synergy as an Hybrid Object-Oriented Conceptual Graph Language -- Notio - A Java API for Developing CG Tools -- SISYPHUS-I -- Multiperspective Analysis of the Sisyphus-I Room Allocation Task Modelled in a CG Meta-Representation Language -- Using Conceptual Graphs to Solve a Resource Allocation Task -- WebKB and the Sisyphus-I Problem -- Constraints and Goals under the Conceptual Graph Formalism: One Way to Solve the SCG-1 Problem -- A Pure Graph-Based Solution to the SCG-1 Initiative -- Context, Logic, and CGs -- Contextual Attribute Logic -- Algorithms for Creating Relational Power Context Families from Conceptual Graphs -- The Lattice of Concept Graphs of a Relationally Scaled Context -- Contexts in Information Systems Development -- Conceptual Structures Represented by Conceptual Graphs and Formal Concept Analysis -- Logic -- A Simulation of Co-identity with Rules in Simple and Nested Graphs -- Conceptual Graphs as Algebras - With an Application to Analogical Reasoning -- Unification over Constraints in Conceptual Graphs -- Tractable and Decidable Fragments of Conceptual Graphs -- Dynamic Semantics for Conceptual Graphs -- Position Papers -- A Case for Variable-Arity Relations: Definitions and Domains -- Graph Structures in Parametric Spaces for Representation of Verbs -- PORT: Peirce Online Resource Testbeds -- Assuring Computer Agent Communications.

Sommario/riassunto

With all of the news about the Internet and the Y2K problem, it is easy to forget that other areas of computer science still exist. Reading the newspaper or watching the television conveys a very warped view of what is happening in computer science. This conference illustrates how a maturing subdiscipline of computer science can continue to grow and integrate within it both old and new approaches despite (or perhaps due to) a lack of public awareness. The conceptual graph community has basically existed since the 1984 publication of John Sowa's book, "Conceptual Structures: Information Processing In Mind and Machine." In this book, John Sowa laid the foundations for a knowledge representation model called conceptual graphs based on semantic networks and the existential graphs of C.S. Peirce. Conceptual graphs constitutes a very powerful and expressive knowledge representation scheme, inheriting the benefits of logic and the mathematics of graphs. The expressiveness and formal underpinnings of conceptual graph theory have attracted a large international community of researchers and scholars. The International Conferences on Conceptual Structures, and this is the seventh in the series, is the primary forum for these researchers to report their progress and activities. As in the past, the doors were open to admit alternate representation models and approaches.