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Nota di contenuto	Invited Papers -- An Introduction to Conceptual Graphs -- Trikonc Inter-Enterprise Architectonic -- Hypermedia Discourse: Contesting Networks of Ideas and Arguments -- Dynamic Epistemic Logic and Knowledge Puzzles -- Peirce on Icons and Cognition -- Conceptual Graphs -- Using Cognitive Archetypes and Conceptual Graphs to Model Dynamic Phenomena in Spatial Environments -- A Datatype Extension for Simple Conceptual Graphs and Conceptual Graphs Rules -- A Knowledge Management Optimization Problem Using Marginal Utility in a Metric Space with Conceptual Graphs -- Conceptual Graphs as Cooperative Formalism to Build and Validate a Domain Expertise -- An Inferential Approach to the Generation of Referring Expressions -- A

Conceptual Graph Description of Medical Data for Brain Tumour
 Classification -- A Conceptual Graph Based Approach to Ontology
 Similarity Measure -- A Comparison of Different Conceptual Structures
 Projection Algorithms -- A Conceptual Graph Approach to Feature
 Modeling -- From Conceptual Structures to Semantic Interoperability of
 Content -- Formal Concept Analysis -- Faster Concept Analysis -- The
 Design Space of Information Presentation: Formal Design Space
 Analysis with FCA and Semiotics -- Reducing the Representation
 Complexity of Lattice-Based Taxonomies -- An FCA Perspective on n-
 Distributivity -- Towards a Semantology of Music -- Analysis of the
 Publication Sharing Behaviour in BibSonomy -- The MILL – Method for
 Informal Learning Logistics -- Bilingual Word Association Networks --
 Using FCA for Encoding Closure Operators into Neural Networks --
 Conceptual Structures -- Arc Consistency Projection: A New
 Generalization Relation for Graphs -- Mining Frequent Closed
 Unordered Trees Through Natural Representations -- Devolved
 Ontology for Smart Applications -- Historical and Conceptual
 Foundation of Diagrammatical Ontology -- Learning Common
 Outcomes of Communicative Actions Represented by Labeled Graphs
 -- Belief Flow in Assertion Networks -- Conceptual Fingerprints:
 Lexical Decomposition by Means of Frames – a Neuro-cognitive Model
 -- Constants and Functions in Peirce’s Existential Graphs -- Revelator
 Game of Inquiry: A Peircean Challenge for Conceptual Structures in
 Application and Evolution -- Short Papers -- Helping System Users to
 Be Smarter by Representing Logic in Transaction Frame Diagrams --
 Quo Vadis, CS? – On the (non)-Impact of Conceptual Structures on the
 Semantic Web -- A Framework for Analyzing and Testing Overlapping
 Requirements with Actors in Conceptual Graphs -- Implementation of
 SPARQL Query Language Based on Graph Homomorphism --
 Cooperative CG-Wrappers for Web Content Extraction -- Conceptual
 Graphs and Ontologies for Information Retrieval -- Representation
 Levels Within Knowledge Representation -- Supporting Lexical
 Ontology Learning by Relational Exploration -- Characterizing
 Implications of Injective Partial Orders -- DVDSleuth: A Case Study in
 Applied Formal Concept Analysis for Navigating Web Catalogs --
 Navigation in Knowledge-Based System for HelpdeskBased on FCA --
 Functorial Properties of Formal Concept Analysis -- Towards an
 Ontology to Conceptualize Solution Analysis Tasks in CSCL
 Environments.

Sommario/riassunto

This volume contains the proceedings of the 15th International Conference on Conceptual Structures (ICCS 2007), which is an annual event that, for the first time, was hosted in the UK. Conceptual structures focus on the representation and analysis of concepts, events, actions and objects with applications in - search, software engineering, manufacturing and business. The conference brings together researchers in computer science, information technology, artificial intelligence, philosophy and a variety of applied disciplines to explore novel ways that information technologies can be leveraged to assist human reasoning and interaction for tangible business or social benefits. Conceptual structures can be used to augment human intelligence by facilitating knowledge integration, decision making, the creation of intelligent software systems and the exploration of implicit structures. The theme for this year’s conference was “Conceptual Structures: Knowledge Architectures for Smart Applications.” Knowledge architectures give rise to smart applications that allow enterprises to share meaning across their interconnected computing resources and to realize transactions that would otherwise remain as lost business opportunities. Conceptual structures and smart applications integrate

the creativity of individuals and organizations with the productivity of computers for a meaningful digital future. A focus of ICCS 2007 was on papers that apply conceptual structures in business and technological settings. Other submitted papers covered research in conceptual structures, which is supported by mathematical and computational theory, including formal concept analysis, algorithm design and graph theory, and a variety of software tools.
