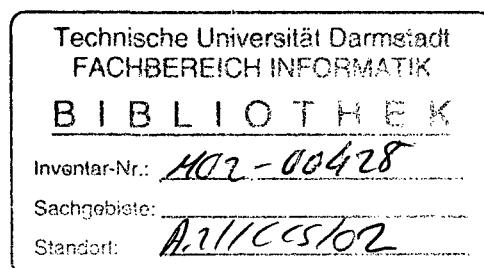


Uta Priss Dan Corbett  
Galia Angelova (Eds.)

# Conceptual Structures: Integration and Interfaces

10th International Conference  
on Conceptual Structures, ICCS 2002  
Borovets, Bulgaria, July 15-19, 2002  
Proceedings



IX,1



Springer

# Table of Contents

## Invited

- Conceptual Structures in Modern Information Retrieval ..... 1  
*Claudio Carpineto*

- Formal Concept Analysis on Its Way from Mathematics  
to Computer Science ..... 2  
*Gerd Stumme*

## Data and Knowledge Structures

- A Linearly Complex Model for Knowledge Representation ..... 20  
*Janos Sarbo and József Farkas*

- Relation Graphs: A Structure for Representing Relations  
in Contextual Logic of Relations ..... 34  
*Silke Pollandt*

- Information Transfer across Simple Concept Graphs ..... 48  
*Grit Malik*

- Relational Scaling and Databases ..... 62  
*Joachim Hereth*

## Information Retrieval

- Knowledge Representation in CGLF, CGIF, KIF, Frame-CG and  
Formalized-English ..... 77  
*Philippe Martin*

- Conceptual Graph Matching for Semantic Search ..... 92  
*Jiwei Zhong, Haiping Zhu, Jianming Li, and Yong Yu*

- Text Schema Mining Using Graphs and Formal Concept Analysis ..... 107  
*Felix H. Gatzemeier and Oliver Meyer*

- Text Mining at Detail Level Using Conceptual Graphs ..... 122  
*Manuel Montes-y-Gómez, Alexander Gelbukh, and Aurelio López-López*

## Natural Language

- Processing Negation in NL Interfaces to Knowledge Bases ..... 137  
*Svetla Boytcheva, Albena Strupchanska, and Galia Angelova*

Automatic Generation and Evaluation of Sentence Graphs out of Word Graphs .....	151
<i>Dennis Reidsma</i>	
CG Representations of Non-literal Expressions .....	166
<i>Henrik Schärfe</i>	
 <b>Ontology and Semantics</b>	
A Peircean Ontology of Semantics .....	177
<i>József Farkas and Janos Sarbo</i>	
Building Concept Lattices by Learning Concepts from RDF Graphs Annotating Web Documents .....	191
<i>Alexandre Delteil, Catherine Faron, and Rose Dieng</i>	
The CG Formalism as an Ontolingua for Web-Oriented Representation Languages .....	205
<i>Olivier Gerbé and Guy W. Mineau</i>	
A Viewpoint Model for Cooperative Building of an Ontology .....	220
<i>Myriam Ribiére and Rose Dieng-Kuntz</i>	
Towards a Pragmatic Web .....	235
<i>Aldo de Moor, Mary Keeler, and Gary Richmond</i>	
A First Step toward the <i>Knowledge Web</i> : Interoperability Issues among Conceptual Graph Based Software Agents Part I .....	250
<i>Guy W. Mineau</i>	
 <b>Interfaces and Applications</b>	
CGWorld – Architecture and Features .....	261
<i>Pavlin Dobrev and Kristina Toutanova</i>	
Extending SNePSwD with Permissive Belief Revision .....	271
<i>César F. Pimentel and Maria R. Cravo</i>	
On Teaching Conceptual Graphs .....	285
<i>Henrik Schärfe, Ulrik Petersen, and Peter Øhrstrøm</i>	
 <b>Logical and Mathematical Foundations</b>	
The Use of Associative Concepts in the Incremental Building of a Logical Context .....	299
<i>Sébastien Ferré and Olivier Ridoux</i>	

Modal Logic for Evaluating Formulas in Incomplete Contexts .....	314
<i>Sergei Obiedkov</i>	
An Embedding of Existential Graphs into Concept Graphs with Negations .....	326
<i>Frithjof Dau</i>	
Interpretation of Automata in Temporal Concept Analysis .....	341
<i>Karl Erich Wolff</i>	
Associative and Formal Concepts .....	354
<i>Uta Priss</i>	
Semiconcept Graphs with Variables .....	369
<i>Julia Klinger</i>	
Existential Concept Graphs of Power Context Families .....	382
<i>Rudolf Wille</i>	
<b>Author Index .....</b>	<b>397</b>