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Uta Priss Simon Polovina
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Conceptual Structures: Knowledge Architectures for Smart Applications

15th International Conference
on Conceptual Structures, ICCS 2007
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Proceedings

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Preface

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 research, 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.

The conference had a rigorous refereeing process. All papers were reviewed by one Editorial Board member and two Program Committee members. About 50% of the submitted papers were accepted as full papers to be presented at the conference. A few additional papers were accepted as short or position papers. In addition, four invited papers and one introductory paper by Simon Polovina are included in this proceedings volume.

We wish to express our thanks to all the authors of submitted papers, to the members of the Editorial Board and Program Committee, to the Workshop and Tutorial Chair, B. Akhgar, the Industry Chair, J. Schiffel, and the Sponsorship Chair, D. Corbett, and to our sponsors!

July 2007

Uta Priss
Simon Polovina
Richard Hill

Organization

The International Conference on Conceptual Structures (ICCS) is the annual conference and principal research forum in the theory and practice of conceptual structures. The conference has been held since 1993 in various locations: Université Laval (Quebec City, 1993), University of Maryland (1994), University of California (Santa Cruz, 1995), Sydney (1996), University of Washington (Seattle, 1997), Montpellier (1998), Virginia Tech (Blacksburg, 1999), Technische Universität Darmstadt (2000), Stanford University (2001), Borovets (Bulgaria, 2002), Technische Universität Dresden (2003), University of Alabama (Huntsville, 2004), Universität Kassel (2005) and Aalborg University (Denmark, 2006).

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