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Studies in Natural Language Processing

Computational lexical semantics

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Preface

This volume on computational lexical semantics emerged from a workshop on lexical semantics issues organized in Toulouse, France, in January 1992. The chapters presented here are extended versions of the original texts.

Lexical semantics is now becoming a major research area in computational linguistics and it is playing more of a central role in various types of applications involving natural language parsers as well as generators.

Lexical semantics covers a wide spectrum of problematics from different disciplines, from psycholinguistics to knowledge representation and to computer architecture, which makes this field relatively difficult to perceive as a whole. The goal of this volume is to present the state of the art in lexical semantics from a computational linguistics point of view and from a range of perspectives: psycholinguistics, linguistics (formal and applied), computational linguistics, and application development. The following points are particularly developed in this volume:

- psycholinguistics: mental lexicons, access to lexical items, form of lexical items, links between concepts and words, and lexicalizing operations;
- linguistics and formal aspects of lexical semantics: lexical semantics relations, prototypes, conceptual representations, event structure, argument structure, and lexical redundancy;
- knowledge representation: systems of rules, treatment of type coercion, aspects of inheritance, and relations between linguistics and world knowledge;
- applications: creation and maintenance of large-size lexicons, the role of the lexicon in parsing and generation, lexical knowledge bases, and acquisition of lexical data;
- operational aspects: processing models and architecture of lexical systems.

The workshop from which this volume was produced and the production of the volume itself have been supported by the GDR-PRC communication Homme-Machine, under contract with the French Ministry of Research and Space and the Centre National de la Recherche Scientifique (CNRS). We thank them for their substantial support. We also thank anonymous reviewers for their comments and the publisher for its cooperation in helping us prepare this volume.

Patrick Saint-Dizier and
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