Modern Computational Models of Semantic Discovery in Natural Language

Part of the Advances in Data Mining and Database Management (ADMDM) Book Series

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Description:
Language—that is, oral or written content that references abstract concepts in subtle ways—is what sets us apart as a species, and in an age defined by such content, language has become both the fuel and the currency of our modern information society. This has posed a vexing new challenge for linguists and engineers working in the field of language-processing: how do we parse and process not just language itself, but language in vast, overwhelming quantities?

Modern Computational Models of Semantic Discovery in Natural Language compiles and reviews the most prominent linguistic theories into a single source that serves as an essential reference for future solutions to one of the most important challenges of our age.

This book includes a comprehensive range of topics and chapters covering digital media, social interaction in online environments, text and data mining, language processing and translation, and contextual documentation, among others.

Readers:
This comprehensive publication benefits an audience of students and professionals, researchers, and practitioners of linguistics and language discovery.


Topics Covered:
- Arab Spring and Media
- Artificial Intelligence
- Corpus Stylistics
- Linguistics
- Machine Translation
- Natural Language Processing
- Ontology
- Sentiment Analysis
- Statistics
- Syntax

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Jalel Akaichi, University of Tunis, Tunisia

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Model of the Empirical Distribution Law for Syntactic and Link Words in “Perfect” Texts
Pavel P. Makagonov, Russian Presidential Academy of National Economy and Public Administration, Moscow, Russia

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Extracting Definitional Contexts in Spanish through the Identification of Hyponymy-Hyperonymy Relations
Olga Acosta, Department of Language Sciences, Pontificia Universidad Católica de Chile, Chile
Gerardo Sierra, Language Engineering Group, Engineering Institute, UNAM, México
César Aguilar, Department of Language Sciences, Pontificia Universidad Católica de Chile, Chile

Chapter 4
Revealing Groups of Semantically Close Textual Documents by Clustering: Problems and Possibilities
František Dařena, Jan Žižka, Mendel University in Brno, Czech Republic

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Semantics-based Document Categorization Employing Semi-supervised Learning
Jan Žižka, František Dařena, Mendel University in Brno, Czech Republic

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Natural Language Processing as Feature Extraction Method for Building Better Predictive Models
Goran Klepac, Raiffeisen Bank Austria d.d., Croatia
Marko Velić, University Computing Centre SRCE, University of Zagreb, Croatia

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Departing the Ontology Layer Cake
Abel Brówarnik, Oded Maimon, Department of Industrial Engineering, Tel Aviv University, Israel

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Semantics of Techno-Social Spaces
Sergey Maruev, Dmitry Stefanovskiy, Alexander Troussov, Russian Presidential Academy of National Economy and Public Administration, Moscow, Russia

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Translational Mismatches Involving Clitics (Illustrated from Serbian ~ Catalan Language Pair)
Jasminka Mihaljević, Dalhousie University, Halifax, Canada
Àngels Catena, Universitat Autònoma de Barcelona, Spain

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Machine Translation Within Commercial Companies
Tomáš Hudík, Teradata Corporation, Czech Republic

Chapter 11
A Corpus-stylistic Approach of the Treatises of Great Athanasius about Idolatry
Georgios Alexandropoulos, National and Kapodistrian University of Athens, Greece

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