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Soggetti	Natural language processing (Computer science) Computational linguistics Artificial intelligence User interfaces (Computer systems) Natural Language Processing (NLP) Computational Linguistics Artificial Intelligence User Interfaces and Human Computer Interaction
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Computational Analysis of Natural Language -- Smart vs. Solid Solutions -- Cognitive Foundations of Semantics -- Language Communication -- Using Language Signs on Suitable Contexts -- Structure and Functioning of Signs -- Formal Grammar -- Language Hierarchies and Complexity -- Basic Notions of Parsing -- Left-Associative Grammar (LAG) -- Hierarchy of LA Grammar -- LA and PS Hierarchies in Comparison -- Words and Morphemes -- Word Form Recognition in LA Morph -- Corpus Analysis -- Basic Concepts of Syntax -- LA Syntax for English -- LA Syntax for German -- Three Kinds of Semantics -- Truth, Meaning, and Ontology -- Absolute and Contingent Propositions -- Database Semantics -- Functional Flow of a Talking Robot -- Conclusion -- Bibliography -- Name Index.
Sommario/riassunto	The central task of a future-oriented computational linguistics is the development of cognitive machines which humans can freely talk with in their respective natural language. In the long run, this task will

ensure the development of a functional theory of language, an objective method of verification, and a wide range of practical applications. Natural communication requires not only verbal processing, but also non-verbal perception and action. Therefore the content of this textbook is organized as a theory of language for the construction of talking robots. The main topic is the mechanism of natural language communication in both the speaker and the hearer. In the third edition the author has modernized the text, leaving the overview of traditional, theoretical, and computational linguistics, analytic philosophy of language, and mathematical complexity theory with their historical backgrounds intact. The format of the empirical analyses of English and German syntax and semantics has been adapted to current practice; and Chaps. 22–24 have been rewritten to focus more sharply on the construction of a talking robot.
