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Titolo	The handbook of computational linguistics and natural language processing // edited by Alexander Clark, Chris Fox, and Shalom Lappin
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Descrizione fisica	1 online resource (801 p.)
Collana	Blackwell Handbooks in Linguistics
Disciplina	410/.285
Soggetti	Computational linguistics Natural language processing (Computer science)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	The Handbook of Computational Linguistics and Natural Language Processing; Contents; List of Figures; List of Tables; Notes on Contributors; Preface; Introduction; Part I Formal Foundations; 1 Formal Language Theory; 1 Introduction; 2 Basic Notions; 3 Language Classes and Linguistic Formalisms; 4 Regular Languages; 5 Context-Free Languages; 6 The Chomsky Hierarchy; 7 Mildly Context-Sensitive Languages; 8 Further Reading; 2 Computational Complexity in Natural Language; 1 A Brief Review of Complexity Theory; 2 Parsing and Recognition; 3 Complexity and Semantics 4 Determining Logical Relationships between Sentences 3 Statistical Language Modeling; 1 Introduction to Statistical Language Modeling; 2 Structured Language Model; 3 Speech Recognition Lattice Rescoring Using the Structured Language Model; 4 Richer Syntactic Dependencies; 5 Comparison with Other Approaches; 6 Conclusion; 4 Theory of

Parsing; 1 Introduction; 2 Context-Free Grammars and Recognition; 3 Context-Free Parsing; 4 Probabilistic Parsing; 5 Lexicalized Context-Free Grammars; 6 Dependency Grammars; 7 Tree Adjoining Grammars; 8 Translation; 9 Further Reading; Part II Current Methods
5 Maximum Entropy Models1 Introduction; 2 Maximum Entropy and Exponential Distributions; 3 Parameter Estimation; 4 Regularization; 5 Model Applications; 6 Prospects; 6 Memory-Based Learning; 1 Introduction; 2 Memory-Based Language Processing; 3 NLP Applications; 4 Exemplar-Based Computational Psycholinguistics; 5 Generalization and Abstraction; 6 Generalizing Examples; 7 Further Reading; 7 Decision Trees; 1 NLP and Classification; 2 Induction of Decision Trees; 3 NLP Applications; 4 Advantages and Disadvantages of Decision Trees; 5 Further Reading
8 Unsupervised Learning and Grammar Induction1 Overview; 2 Computational Learning Theory; 3 Empirical Learning; 4 Unsupervised Grammar Induction and Human Language Acquisition; 5 Conclusion; 9 Artificial Neural Networks; 1 Introduction; 2 Background; 3 Contemporary Research; 4 Further Reading; 10 Linguistic Annotation; 1 Introduction; 2 Review of Selected Annotation Schemes; 3 The Annotation Process; 4 Conclusion; 11 Evaluation of NLP Systems; 1 Introduction; 2 Fundamental Concepts; 3 Evaluation Paradigms in Common Evaluation Settings; 4 Case Study: Evaluation of Word-Sense Disambiguation
5 Case Study: Evaluation of Question Answering Systems6 Summary; Part III Domains of Application; 12 Speech Recognition; 1 Introduction; 2 Acoustic Modeling; 3 Search; 4 Case Study: The AMI System; 5 Current Topics; 6 Conclusions; 13 Statistical Parsing; 1 Introduction; 2 History; 3 Generative Parsing Models; 4 Discriminative Parsing Models; 5 Transition-Based Approaches; 6 Statistical Parsing with CCG; 7 Other Work; 8 Conclusion; 14 Segmentation and Morphology; 1 Introduction; 2 Unsupervised Learning of Words; 3 Unsupervised Learning of Morphology; 4 Implementing Computational Morphologies
5 Conclusions

Sommario/riassunto

This comprehensive reference work provides an overview of the concepts, methodologies, and applications in computational linguistics and natural language processing (NLP). Features contributions by the top researchers in the field, reflecting the work that is driving the discipline forward. Includes an introduction to the major theoretical issues in these fields, as well as the central engineering applications that the work has produced. Presents the major developments in an accessible way, explaining the close connection between scientific understanding of the computational proper.
