

1. Record Nr.	UNINA9910254828303321
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Titolo	Modern Language Models and Computation : Theory with Applications / / by Alexander Meduna, Ondej Soukup
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-63100-4
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIX, 548 p. 20 illus.)
Disciplina	410.151
Soggetti	Computers Computer science—Mathematics Computational linguistics Theory of Computation Mathematics of Computing Computational Linguistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Abstract -- Acknowledgments -- Preface -- Mathematical Background -- Classical Rewriting in Language Theory: Basics -- Regulated Generation -- Parallel Generation -- Jumping Generation -- Alternative Generation Based on Algebraic Restrictions -- Regulated Acceptance -- Jumping Acceptance -- Acceptance with Deep Pushdowns -- Alternative Acceptance Based on Algebraic Restrictions -- Generation of Languages by Automata -- Language Multigeneration by Grammar Systems -- Applications and Their Perspectives in General -- Applications in Linguistics -- Applications in Biology -- Concluding and Bibliographical Remarks -- Bibliography -- Index to Special Symbols -- Index to Language Families and Their Models -- Subject Index.
Sommario/riassunto	This textbook gives a systematized and compact summary, providing the most essential types of modern models for languages and computation together with their properties and applications. Most of these models properly reflect and formalize current computational methods, based on parallelism, distribution and cooperation covered in this book. As a result, it allows the user to develop, study, and improve

these methods very effectively. This textbook also represents the first systematic treatment of modern language models for computation. It covers all essential theoretical topics concerning them. From a practical viewpoint, it describes various concepts, methods, algorithms, techniques, and software units based upon these models. Based upon them, it describes several applications in biology, linguistics, and computer science. Advanced-level students studying computer science, mathematics, linguistics and biology will find this textbook a valuable resource. Theoreticians, practitioners and researchers working in today's theory of computation and its applications will also find this book essential as a reference.

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