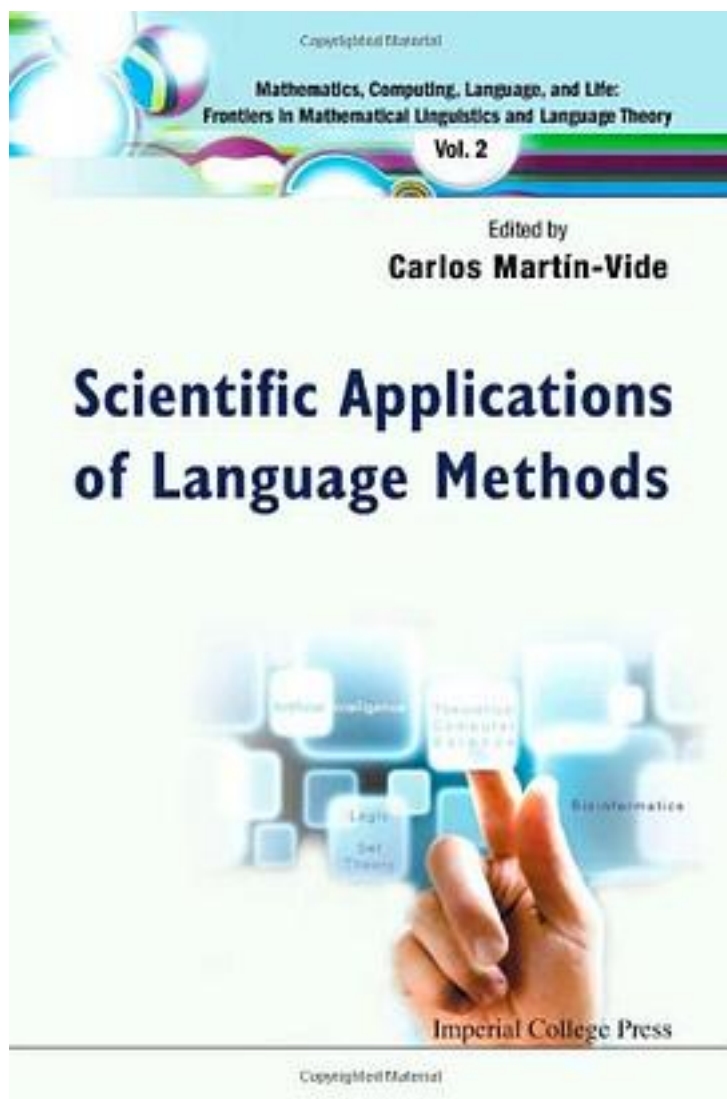


Scientific Applications of Language Methods



[Scientific Applications of Language Methods_ 下载链接1](#)

著者:Carlos Martín-Vide

出版者:Imperial College Press

出版时间:2010-10-29

装帧:Hardcover

isbn:9781848165441

Presenting interdisciplinary research at the forefront of present advances in information technologies and their foundations, "Scientific Applications of Language Methods" is a multi-author volume containing pieces of work (either original research or surveys) exemplifying the application of formal language tools in several fields, including logic and discrete mathematics, natural language processing, artificial intelligence, natural computing and bioinformatics.

作者介绍:

目录:	1. 1 Descriptive Complexity --- An Introductory Survey, M. Kutrib	1
1.1.	1 Introduction	1
1.2.	1 Descriptive Systems and Complexity Measures	3
1.3.	1 Measuring Sizes	6
1.4.	1 Measuring Resources	33
1.5.	1 Non-Recursive Trade-Offs	39
1	References	51
2.	1 Classifying All Avoidable Sets of Partial Words of Size Two, E. Weissenstein	59
2.1.	1 Introduction	60
2.2.	1 Preliminaries	62
2.3.	1 Unavoidable Sets of Partial Words of Size Two	64
2.4.	1 Canonical Forms	70
2.5.	1 The Answer to the Conjectures	74
2.6.	1 The Classification	95
2.7.	1 Conclusion	99
1	References	100
3.	1 On Glushkov K-graphs, M. Flouret	103
3.1.	1 Introduction	103
3.2.	1 Definitions	105
3.3.	1 Acyclic Glushkov WFA Properties	114
3.4.	1 Glushkov K-graph with Orbits	124
3.5.	1 Algorithm for Orbit Reduction	127
3.6.	1 Conclusion	131
1	References	131
4.	1 Natural Language Dictionaries Implemented as Finite Automata, S. Ristov	133
4.1.	1 Dictionaries as Finite Automata	133
4.2.	1 Automata as Mappings	149
4.3.	1 Construction Methods	165
4.4.	1 Internal Structure and Compression	187
1	References	200
5.	1 Tree-Language Based Querying of Hierarchically Structured and Semi-Structured Data, A. Berlea	205
5.1.	1 Introduction	205
5.2.	1 Preliminaries	207
5.3.	1 Regular Forest Languages	217
5.4.	1 Grammar Queries	230
5.5.	1 Practical Application: A Pattern Language for XML Querying	259
5.6.	1 Online Querying	275
5.7.	1 Summary and Outlook	294
5.8.	1 Proofs of Theorems	295
1	References	306
6.	1 Quotient Monoids and Concurrent Behaviours, M. Koutny	313
6.1.	1 Introduction	314

6.2.1 Preliminaries	318
6.3.1 Partial Orders and Order Structures	326
6.4.1 Mazurkiewicz Traces	334
6.5.1 Comtraces	337
6.6.1 Generalised Comtraces	354
6.7.1 Elementary Net Systems	360
6.8.1 EN-systems with Inhibitor and Mutex Arcs	372
6.9.1 Concluding Remarks	382
1 References	383
7.1 Correction Queries in Active Learning, C. Tirnauca	387
7.1.1 Introduction	387
7.2.1 Preliminaries	389
7.3.1 Learning Models	391
7.4.1 Learning with Correction Queries	393
7.5.1 Polynomial Time Learning with Correction Queries	403
1 References	416
8.1 Applications of Grammatical Inference in Software Engineering: Domain Specific Language Development, F. Javed	421
8.1.1 Introduction	422
8.2.1 Analysis Phase of DSL Development	424
8.3.1 Design Phase of DSL Development	426
8.4.1 Grammatical Inference and Language Design	429
8.5.1 Case Study	445
8.6.1 Related Work	448
8.7.1 Conclusion	452
1 References	453
9.1 Small Size Insertion and Deletion Systems, S. Verlan	459
9.1.1 Introduction	459
9.2.1 Definitions	461
9.3.1 Basic Simulation Principles	466
9.4.1 Insertion-Deletion Systems with Rules of Small Size	470
9.5.1 Context-Free Insertion-Deletion Systems	472
9.6.1 One-Sided Contextual Insertion-Deletion Systems	481
9.7.1 Pure Insertion Systems	497
9.8.1 Graph-Controlled Insertion-Deletion Systems	503
9.9.1 Graph-Controlled Insertion-Deletion Systems with Priorities	514
9.10.1 Bibliographical Remarks	520
1 References	521
10.1 Accepting Networks of Evolutionary Word and Picture Processors: A Survey, V. Mitrana	525
10.1.1 Introduction	525
10.2.1 Basic Definitions	527
10.3.1 Computational Power	536
10.4.1 Universal ANEPs and ANEPFCs	541
10.5.1 A Direct Simulation	544
10.6.1 Accepting Networks of Splicing Processors	545
10.7.1 Problem Solving with ANEPs/ANEPFCs	548
10.8.1 Accepting Networks of Picture Processors	549
1 References	558
11.1 Quantum Automata and Periodic Events, B. Palano	563
11.1.1 Introduction	563
11.2.1 Preliminaries	566
11.3.1 Testing Periodicity on Unary Iqfa's	570
11.4.1 Synthesis of Iqfa's Inducing Periodic Events	572

11.5. 1 Application to Periodic Languages	580
1 References	582
12. 1 Soliton Circuits and Network-Based Automata: Review and Perspectives, M. Kresz	585
12.1. 1 Introduction	586
12.2. 1 Basic Concepts	588
12.3. 1 Soliton Graphs and Automata	593
12.4. 1 Elementary Decomposition of Soliton Graphs and Automata	597
12.5. 1 Characterizing Soliton Automata	600
12.6. 1 Complete Systems of Soliton Automata	610
12.7. 1 Algorithms for Soliton Automata	615
12.8. 1 Extensions of the Model and Further Research	623
12.9. 1 Summary	627
1 References	628
13. 1 Inferring Leadership Structure from Data on a Syntax Change in English, W. Garrett Mitchener	633
13.1. 1 Introduction	634
13.2. 1 The Available Data	639
13.3. 1 Formulation of the Variable Influence Model	640
13.4. 1 Fitting the Do-support Data	644
13.5. 1 Results and Discussion	650
13.6. 1 Future Directions	652
13.7. 1 Conclusion	656
1 References	658
14. 1 Weighted Automata Modeling for High Density Linkage Disequilibrium Mapping, T. Trang	663
14.1. 1 Introduction	664
14.2. 1 Biological Problem and Formulation	667
14.3. 1 Fundamentals of Discrete Structures	676
14.4. 1 Variable Length Finite Automata (VLFA)	682
14.5. 1 Experimental Results on SNP Data	706
14.6. 1 Conclusion	719
1 References	720
1 Author Index	723
1 Subject Index	
• • • • •	(收起)

[Scientific Applications of Language Methods_ 下载链接1](#)

标签

语言学

语料库语言学

计算语言学和语料库

计算语言学

数据处理

评论

[Scientific Applications of Language Methods_ 下载链接1](#)

书评

[Scientific Applications of Language Methods_ 下载链接1](#)