

Information Retrieval Techniques for Pattern Matching: Managing and Searching Textual and XML Information in 21st Century Applications

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Book published by Lambert Academic Publishing

Abstract.

Information is the main value of Information Society. The recent developments in computing power and telecommunications, along with the constant drop of Internet access costs and data management and storing, created the right conditions for the global diffusion of the Web and, more generally, of new research tools able to analyze information and their contents. Depending on the particular application scenario and on the type of information that has to be managed and searched, different techniques need to be devised. In this book, the author deals with the two most common types of information: plain text, discussed in the first part, and semi-structured data, in particular XML documents, deeply discussed the second part. The detailed analysis of approximate matching, duplicate document detection, exact, approximate and semantic query answering, multi-version document management and personalized access techniques offered in this book will guide Information Technology professionals and users in effectively and efficiently managing information and knowledge, thus answering the increasingly complex Information needs of most 21st century applications.

Contents

Acknowledgments	1
Introduction	3
I Pattern Matching for Plain Text	7
1 Approximate (sub)sequence matching	9
1.1 Foundations	11
1.1.1 Background	11
1.1.2 Approximate sub ² sequence matching	13
1.2 Approximate matching processing	17
1.3 Experimental Evaluation	19
1.3.1 Data sets	19
1.3.2 Implementation	19
1.3.3 Performance	20
1.4 Related work	22
2 Approximate matching for EBMT	25
2.1 Research in the EBMT field	27
2.1.1 Logical representation of examples	28
2.1.2 Similarity metrics and scoring functions	28
2.1.3 Efficiency and flexibility of the search process	29
2.1.4 Evaluation of EBMT systems	30
2.1.5 Some notes about commercial systems	30
2.2 The suggestion search process in EXTRA	30
2.2.1 Definition of the metric	31
2.2.2 The involved processes	32
2.3 Document analysis	33
2.4 The suggestion search process	35
2.4.1 Approximate whole matching	36
2.4.2 Approximate sub ² matching	37

2.4.3	Meeting suggestion search and ranking with translator needs	38
2.5	Experimental Evaluation	39
2.5.1	Implementation notes	39
2.5.2	Data Sets	40
2.5.3	Effectiveness of the system	40
2.5.4	Efficiency of the system	49
2.5.5	Comparison with commercial systems	51
3	Approximate matching for duplicate document detection	55
3.1	Document similarity measures	57
3.1.1	Logical representation of documents	57
3.1.2	The resemblance measure	58
3.1.3	Other possible indicators	61
3.2	Data reduction	63
3.2.1	Filtering	63
3.2.2	Intra-document reduction	65
3.2.3	Inter-document reduction	67
3.3	Related work	68
3.4	Experimental Evaluation	71
3.4.1	The similarity computation module	72
3.4.2	Document generator	74
3.4.3	Document collections	74
3.4.4	Test results	75
II	Pattern Matching for XML Documents	89
4	Query processing for XML databases	91
4.1	Tree signatures	93
4.1.1	The signature	94
4.1.2	Twig pattern inclusion evaluation	95
4.2	A formal account of twig pattern matching	98
4.2.1	Conditions on pre-orders	101
4.2.2	Conditions on post-orders	103
4.2.3	On the computation of new answers	106
4.2.4	Characterization of the delta answers	106
4.3	Exploiting content-based indexes	107
4.3.1	Path matching	107
4.3.2	Ordered twig matching	108
4.3.3	Unordered twig matching	114
4.4	An overview of pattern matching algorithms	116

4.5	Unordered decomposition approach	120
4.5.1	Identification of the answer set	121
4.5.2	Efficient computation of the answer set	124
4.6	The XML query processor architecture	127
4.7	Experimental evaluation	129
4.7.1	Experimental setting	129
4.7.2	General performance evaluation	132
4.7.3	Evaluating the impact of each condition	133
4.7.4	Decomposition approach performance evaluation	137
5	Approximate query answering in heterogeneous XML collections	139
5.1	Matching and rewriting services	141
5.1.1	Schema matching	143
5.1.2	Automatic query rewriting	148
5.2	Structural disambiguation service	149
5.2.1	Overview of the approach	151
5.2.2	The disambiguation algorithm	154
5.3	Related work	157
5.3.1	Approximate query answering	157
5.3.2	Free-text disambiguation	158
5.3.3	Structural disambiguation	158
5.4	Experimental evaluation	159
5.4.1	Matching and rewriting	159
5.4.2	Structural disambiguation	163
5.5	Future extensions towards Peer-to-Peer scenarios	169
6	Multi-version management and personalized access to XML documents	171
6.1	Temporal versioning and slicing support	172
6.1.1	Preliminaries	173
6.1.2	Providing a native support for temporal slicing	175
6.2	Semantic versioning and personalization support	182
6.2.1	The complete infrastructure	183
6.2.2	Personalized access to versions	184
6.3	Related work	188
6.3.1	Temporal XML representation and querying	188
6.3.2	Personalized access to XML documents	189
6.4	Experimental evaluation	190
6.4.1	Temporal slicing	190
6.4.2	Personalized access	195

Conclusions and Future Directions	199
A More on EXTRA techniques	201
A.1 The disambiguation techniques	201
A.1.1 Preliminary notions	201
A.1.2 Noun disambiguation	203
A.1.3 Verb disambiguation	206
A.1.4 Properties of the confidence functions and optimization	207
A.2 The <i>MultiEditDistance</i> algorithms	208
B The complete XML matching algorithms	213
B.1 Notation and common basis	213
B.2 Path matching	214
B.2.1 Standard version	214
B.2.2 Content-based index optimized version	217
B.3 Ordered twig pattern matching	219
B.3.1 Standard version	219
B.3.2 Content-based index optimized version	224
B.4 Unordered twig pattern matching	232
B.4.1 Standard version	232
B.4.2 Content-based index optimized version	236
B.5 Sequential scan range filters	239
B.5.1 Basic filter	240
B.5.2 Content-based filter	241
C Proofs	243
C.1 Proofs of Chapter 1	243
C.2 Proofs of Chapter 3	244
C.3 Proofs of Chapter 4	245
C.4 Proofs of Appendix B	248

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