<table>
<thead>
<tr>
<th>A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>abduction</td>
<td>199, 262</td>
</tr>
<tr>
<td>active rules</td>
<td>259</td>
</tr>
<tr>
<td>aggregate</td>
<td>95, 100, 109, 114, 242, 256</td>
</tr>
<tr>
<td>aggregate constraints</td>
<td>242</td>
</tr>
<tr>
<td>algorithm</td>
<td>1, 2, 8, 29, 32, 33, 36, 41, 44, 47, 56, 58,</td>
</tr>
<tr>
<td></td>
<td>228, 252, 257, 304</td>
</tr>
<tr>
<td>analysis of natural language</td>
<td>199</td>
</tr>
<tr>
<td>analytical-spatial query processing</td>
<td>97</td>
</tr>
<tr>
<td>answer</td>
<td>258</td>
</tr>
<tr>
<td>answer, consistent</td>
<td>258</td>
</tr>
<tr>
<td>association rule</td>
<td>1, 2, 4, 10, 44, 45, 47, 49, 62, 69, 75</td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>business environment</td>
<td>118</td>
</tr>
<tr>
<td>business intelligence</td>
<td>118, 122</td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>catalog</td>
<td>305</td>
</tr>
<tr>
<td>CD-Tree</td>
<td>29, 30, 33, 41</td>
</tr>
<tr>
<td>cell-based algorithm</td>
<td>32, 41</td>
</tr>
<tr>
<td>class hierarchies</td>
<td>179, 202, 233</td>
</tr>
<tr>
<td>classification</td>
<td>62</td>
</tr>
<tr>
<td>clause</td>
<td>241</td>
</tr>
<tr>
<td>cluster</td>
<td>30</td>
</tr>
<tr>
<td>collection and storage of data</td>
<td>120</td>
</tr>
<tr>
<td>common warehouse model (CWM)</td>
<td>97, 98</td>
</tr>
<tr>
<td>conceptual data model</td>
<td>167, 168, 179, 181, 184</td>
</tr>
<tr>
<td>connectivity phenomena</td>
<td>138, 140, 148</td>
</tr>
<tr>
<td>consistent</td>
<td>242</td>
</tr>
<tr>
<td>CS-d</td>
<td>30, 32, 36, 41</td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>daily production</td>
<td>119</td>
</tr>
<tr>
<td>data mining</td>
<td>8, 45, 61, 65, 78, 97, 118, 122, 128, 133</td>
</tr>
<tr>
<td>database management system</td>
<td>198</td>
</tr>
<tr>
<td>database modeling</td>
<td>168</td>
</tr>
<tr>
<td>database refactoring</td>
<td>292</td>
</tr>
<tr>
<td>data integration</td>
<td>270</td>
</tr>
<tr>
<td>Datalog</td>
<td>239, 240</td>
</tr>
<tr>
<td>data mining</td>
<td>2, 30, 118, 120, 121, 122, 123, 126, 128, 287</td>
</tr>
</tbody>
</table>
data mining activities 128
data mining algorithms 118
data mining information 120
data mining in manufacturing 122
data mining results 126
data mining techniques 118, 123
data mining tools 118
data sets repository 301
decision tree 118, 119, 129
decision tree as a data mining method 129
deduction 199
denial 241
description logic 302
discontinuous dependencies 223
discrimination network 202
distributed database 240, 271
domain constraint 242
downtime 119
DTD 63, 265, 269
dummy constant 252

E
employee database 119, 120
expansion of project 121
extensional predicate 240

F
Fast UPdate algorithm (FUP) 45, 47
filtering unification module 150
finite differencing 251, 255
foreign key constraint 242
formal differentiatation 255
functional dependencies 242
future requirement 287
fuzzy conceptual data modeling 168
fuzzy logic 167, 168, 169, 177, 184
fuzzy logical database modeling 168
fuzzy set 169

G
GeoMiner 97
GOLAP project 96
grammar, context-free 202
grammar, context-free phrase-structure 222
grammar, context-sensitive 202
GridOF 31

H
Herbrand model 241, 259
heterogeneity 97
heuristic 302
hierarchical model 199

I
imperfect information 169
inclusion dependencies 242
inconsistency 242
incremental mining 48
inductive database 62
InferenceEngine 152
information, imprecise and uncertain 167
information compression 228
integrity constraints 241, 242
intelligent database system 198
intended model 241
intensional predicates 240
inter-relation constraint 242
intra-relation constraint 242
itemset 1, 2, 9, 12, 16, 44, 45, 48, 58, 81
itemset, large 45, 50
itemset, pre-large 45

K
knowledge base (KB) 299
knowledge discovery in databases (KDD) 122
knowledge discovery process (KDD) 62
knowledge discovery system 62

L
large itemset 45, 50
least 241
Lempel-Ziv algorithm 228
logical database model 168, 187

M
machinery capacity 119
manufacturing organization 118
Index

MapCube 97
material implication 212
meaning 227
medical diagnosis 207
mining, incremental 45
mining of knowledge 121
model 241
modification 289
multi-valued dependencies 242
multiple alignments 200

N
narrative documents 138
Narrative Knowledge Representation Language (NKRL) 137
namespace 61, 68, 75, 92
narrative document 138, 140
natural language, analysis and production 199
natural language front ends 227
natural language syntax 227
negative border 45
negative items 5
nested-loop algorithm (NL) 31
network 199, 202

O
object-oriented model 180, 199
OLAP operations 97
ontology-driven GIS 97
Open Geospatial Consortium (OGC) 97
outlier detection 29, 30, 38, 41

P
paraconsistent logic 270, 274
parameters 252
parsing 224
part-whole hierarchies 202, 227, 233
partial evaluation 250
partial subsumption 252
pattern 5, 20, 30, 45, 61, 62, 65, 86, 128, 150, 203, 210, 216, 229, 231, 269, 272, 302
pattern recognition 199, 203
possibility distribution 170
post-test 244
pre-large itemset 50
pre-stored spatial aggregate 109
pre-test 244, 254
predicate 240
predictive approach 293
probabilistic reasoning 199
probability 4, 141, 202, 214, 274
production of a sentence 226
production of natural language 199

Q
query containment 240, 256, 257

R
reasoning, chains of 199
reasoning, nonmonotonic 199
referential constraint 242
relational model 168, 173, 199, 269
relation 240
repair 258
requirements ontology 297
resolution-based 249, 250
reverse engineered (RE) 297
rollback 257
rule 241
rule annotation 252

S
schema evolution 286, 287
search patterns 150
semantic 210
signed theory 259
simplification 244, 245, 246
sources of data for mining 119
spatial data cube construction 97
spatial data mining 97
spatial data warehouse (SDW) 94, 97, 109
SP theory 197, 199, 202
stratified databases 241
support 2
T

traditional ontologies 138
transaction identifier (TID) 6, 73
transformation 152
tree-shaped structure 118
tree 202
truth table 212, 214
tuple constraint 242
type definition 205

U

unsupervised learning 199
update 244, 245, 252, 269, 272
update pattern 252, 269
update propagation 245

V

variable 205
versioning 289, 290
view definition 241, 249, 263
view 240, 289

W

weakest precondition 254, 255

X

XML 61, 62, 63, 70, 203, 239, 264
XML for data mining (XDM) 61, 63, 70
XML-schema 63
XML databases 264
XPath 266
XQuery 266