



Subject Index—Volumes 101–110

Abilities	(101) 201	Autoepistemic logic	(101) 1
Absolute loss bounds	(106) 335	Automated deduction	(103) 183
Abstract character of adjoining	(103) 117	Automated negotiation	(104) 1
Abstraction	(107) 1	Automated reasoning	(106) 1, (110) 57
Achievability	(101) 201	Autonomous agents	(103) 5, (106) 267
Actions	(102) 163, (105) 263	Autonomous vehicles	(103) 49
Acyclic directed graph	(108) 1		
Adjoining	(103) 117	Backtracking	(109) 161
Agent architectures	(108) 179	Batch learning	(102) 295
Agent communication languages	(105) 1	Bayes networks	(104) 287
Agent languages	(108) 179, (108) 257	Bayesian belief networks	(102) 21
Agent learning	(110) 215	Bayesian decision making	(105) 345
Agent theory	(108) 179	Bayesian inference	(103) 77
Agnostic learning	(107) 175	Bayesian methods	(101) 135
Aircraft	(101) 35	Bayesian networks	(106) 77
Algebraic closure	(101) 251	BDI	(103) 157
Algorithm of Abraham	(104) 71	BDI model	(104) 1
Algorithms	(102) 143, (108) 257, (109) 273	Behavior reconstruction	(110) 135
Algorithms and complexity	(110) 57	Belief	(108) 309
Allen's algebra	(106) 205	Belief change	(108) 309
Almost parse	(103) 117	Belief networks	(101) 135
Anytime algorithm	(106) 181	Belief revision	(104) 331
Applications	(103) 237	Benefits inquiry	(103) 237
Arc consistency	(107) 125	Bilattices	(102) 97
Architectures	(103) 5	Bogart	(107) 1
Argumentation	(104) 1	Boolean functions	(107) 219
Aristotelian term logic	(109) 33	Boolean operations	(102) 295
Arrangement computation in D dimensions	(105) 139	Branch and bound	(107) 149
Art and entertainment	(107) 29		
Artificial intelligence	(103) 237	Case adaptation	(102) 249
Artificial perception and cognition	(102) 187	Case retrieval	(102) 249
Assembly planning	(105) 139	Case-based reasoning	(102) 249
Assumption-based reasoning	(104) 71	Categorical formalizations in AI	(102) 187
Asynchronous discrete-event systems	(110) 135	Causality	(104) 339
ATMS	(104) 71	Causation	(108) 125
Attribute prediction	(106) 109	Center of an utterance	(103) 117
		Centering	(103) 117

- Characteristic models (110) 57
 Circumscription (102) 163, (104) 107, (104) 313
 Coalition formation (101) 165
 Cognitive map (107) 265
 Cognitive robotics (101) 201
 Combination of inference systems (109) 1
 Command prediction (103) 295
 Commercial applications (103) 237
 Communication and concurrency (105) 1
 Complete algorithms (105) 139
 Complete classification (106) 205
 Complexity (102) 21, (102) 143, (104) 331, (109) 273
 Complexity of inference (103) 117
 Computational complexity (105) 47, (106) 205, (108) 1, (108) 69, (108) 257
 Computational learning theory (107) 175
 Computationalism (104) 265
 Computer-aided knowledge acquisition (109) 33
 Computing marginals (102) 323
 Concept discovery (109) 211
 Concept hierarchies (109) 211
 Concurrency (107) 63
 Condensation (108) 1
 Conditional logic (102) 81, (105) 105
 Conditional revision (110) 103
 Conjunctive normal form (108) 1
 Consistency (109) 243
 Constrained formal systems (103) 117
 Constraint (101) 35
 Constraint class (101) 251
 Constraint satisfaction (105) 161, (107) 125, (109) 243, (109) 273
 Constraint satisfaction problem (108) 31
 Constraint-based planning (103) 5
 Constructive induction (109) 211
 Content relevant textual knowledge base query handling (109) 33
 Control of inference (103) 117
 Convex sets (106) 77
 Cooperation (103) 157
 Cooperative behavior (110) 275
 Corpus-based methods (103) 323
 Counterfactuals (108) 125
 Credal sets (106) 77
 Cross-language IR (103) 323

 Data association (103) 77
 Data mining (107) 219
 Database and knowledge base systems (105) 77
 Database theory (101) 227
 Decision making (105) 209
 Decision support (105) 263

 Decision tables (109) 187
 Decision trees (109) 187
 Default logic (101) 1, (102) 81, (106) 1, (109) 71
 Default reasoning (106) 1
 Defeasible consequence (109) 71
 Defeasible reasoning (106) 267
 Dempster–Shafer (105) 345
 Dependence (103) 157
 Dependency directed backtracking (105) 161
 Description logic (101) 227, (104) 165, (107) 303, (109) 1
 Design (101) 35
 Design generalization (104) 211
 Diagnosis (102) 39, (103) 5
 Diagnostic systems (105) 295
 Directed arc-consistency (107) 149
 Disjunctive linear relations (102) 143
 Distributed AI (105) 1
 Dynamic abduction (102) 21
 Dynamic backtracking (105) 161
 Dynamic models (107) 99
 Dynamic scene understanding (103) 49
 Dynamic variable ordering heuristic (109) 161

 Effective achievability (101) 201
 Emergence (103) 157
 Engineering (101) 35
 Environmental policies (101) 135
 Epistemic states (108) 309
 Execution (103) 5
 Expert systems (103) 237
 Explanation (104) 331
 Explanation-based learning (105) 161
 Exploration versus exploitation (101) 267
 Expressive power (104) 313, (107) 303
 Expressiveness of circumscription (104) 313
 Extended logic programming (109) 297

 Finite state transducers (103) 117
 First-order logic (103) 237, (105) 105
 Flaw resolution (105) 161
 Flexible teamwork (110) 241
 Formal theory of diagnosis (105) 295
 Forward checking (109) 161
 Frame problem (103) 183
 Full meet base revision (110) 103
 Function decomposition (109) 211
 Functional dependency (108) 1

 Generalization (109) 211
 Generalization capability (107) 347
 Generalized vector space model (103) 323
 Geometric reasoning (105) 139

- Global consistency (101) 251
 Goal regression (106) 267
 Goal-directed reasoning (105) 263
 Goals (105) 263
 Grand challenge (110) 193
 Graph colouring (109) 161
 Graph-based induction (103) 295
 Graphics generation (103) 95
 Growing methods (102) 295
 Gödel (104) 265
- Hellinger metric (107) 99
 Heterogeneous information access (108) 179
 Horn rules (101) 227, (104) 165
 Horn theory (108) 1
 Hugin architecture (102) 323
 Human–computer collaboration (107) 335
 Hybrid languages (101) 227, (104) 165
 Hybrid models (101) 135
 Hybrid systems (110) 293
- Image processing (103) 49, (103) 95
 Incremental learning (102) 295
 Inductive learning (101) 63
 Inductive logic programming (107) 175
 Inference (106) 77
 Influence diagrams (107) 99
 Information retrieval (103) 323
 Information retrieval systems (109) 33
 Inheritance (103) 237
 Inheritance networks (103) 237
 Inheritance reasoning (106) 221
 Insurance (103) 237
 Intelligent information systems (105) 77
 Intensional logic (109) 33
 Intention (105) 263, (106) 161
 Intervals (106) 77
- Junction trees (107) 99
- Knowledge base validation (109) 33
 Knowledge base verification (101) 227
 Knowledge discovery (107) 219, (107) 335
 Knowledge extraction (102) 295
 Knowledge filtering (109) 187
 Knowledge level (105) 1
 Knowledge representation (104) 165, (105) 105,
 (105) 209, (107) 303, (108) 1, (108) 179,
 (110) 57
- Language generation (103) 95
 Learning (104) 287
- Learning algorithms (106) 335
 Lexicalized grammars (103) 117
 Lexicalized tree-adjoining grammars (103) 117
 Line drawing labelling (108) 31
 Line drawings (105) 47
 Linear connection method (103) 183
 Linear separability (102) 295
 Local computations on complex structures
 (103) 117
 Local consistency (101) 251
 Local learning (104) 287
 Local space (107) 265
 Local statistical computations (103) 117
 Locality of structures (103) 117
 Locally monadic structure (103) 117
 Logic programming (109) 71
 Logical analysis of data (107) 219
 Logical implication (107) 63
- Machine learning (103) 295, (109) 187, (109) 211
 Machine vision (103) 49
 Matching (103) 77
 Mathematical foundations of AI (102) 187
 Mathematical programming (109) 1
 Maximal/partial constraint satisfaction (107) 149
 MBR transform (104) 287
 Means-ends analysis (109) 111
 Mechanical design (104) 211
 Media coordination (103) 95
 Medical AI (103) 237
 Medical insurance (103) 237
 Memory-based learning (104) 287
 Meta-learning (104) 287
 Minimalist robotics (110) 293
 Minimum description length principle (106) 109
 Missing bits (107) 219
 Mistake bounds (106) 335
 Mobile robot cooperation (110) 293
 Mobile robots (103) 49
 Modal logic (109) 1
 Modal mu-calculus (107) 63
 Modal nonmonotonic logics (101) 1
 Model (101) 35
 Model checking (107) 63
 Model elimination (106) 1
 Model theory (107) 303
 Model-based consistency checking (106) 1
 Model-based diagnosis (110) 135
 Model-based diagnostics (104) 71
 Model-based reasoning (102) 39, (103) 5, (110) 57
 Modular learning (102) 295
 Monadic predicate (103) 117
 Motion planning (105) 139

- Multi-agent communication (110) 241
 Multi-agent cooperation (101) 165
 Multi-agent learning (110) 275
 Multi-agent systems (105) 1, (110) 1, (110) 241
 Multi-agents (110) 215
 Multi-robot teams (110) 293
 Multimedia (103) 95
 Multiple perspective reasoning (105) 209
 Multiple trauma management (105) 263
 Multiple-valued systems (102) 97
 Multivariate state space models (107) 99

 Narratives (104) 107
 Natural language syntax conform text modelling (109) 33
 Navigation on embedded graphs (101) 267
 Nested abnormality theories (102) 163, (104) 107
 Neural network (107) 347
 Next-best explanation (102) 21
 Nogood learning (105) 161
 Nonmonotonic inheritance (109) 71
 Nonmonotonic logic (103) 237, (106) 139
 Nonmonotonic reasoning (101) 1, (103) 237, (104) 313, (105) 105, (106) 221, (109) 297, (110) 103
 Nonmonotonic techniques (103) 237
 NP-complete (106) 181
 NP-completeness (108) 31
 NP-hardness (107) 219
 Number partitioning (106) 181
 Numerical (101) 35

 Object identification (103) 77
 Optimization (101) 35, (101) 135
 Origins of language and meaning (103) 133
 OSCAR (106) 267

 Paraconsistency (102) 97
 Parameter estimation (101) 135
 Partial forward checking (107) 149
 Partially defined Boolean functions (107) 219
 Partially observable Markov decision processes (101) 99
 Path-consistency (108) 69
 Phase transition (109) 161
 Physical embodiment (110) 275
 Physics (101) 35
 Plan recognition (105) 263
 Planning (101) 63, (101) 99, (103) 183, (105) 161, (105) 263, (106) 267, (109) 111
 Point–interval algebra (109) 273
 Polynomial algorithms and complexity (109) 297
 Portability (107) 1

 Preference handling (109) 297
 Preferential logics (102) 97
 Preferential relations (110) 103
 Priorities (106) 221
 Probabilistic expert systems (107) 99
 Probabilistic inference (104) 287
 Probabilistic models (101) 135
 Probabilistic reasoning (102) 21, (104) 331, (105) 209
 Probabilistic semantics (102) 81
 Probability (104) 71
 Process algebra (107) 63
 Propagation (105) 161
 Propositional logic (104) 71
 Propositional systems (109) 187
 PTPP (106) 1

 Qualification (103) 183
 Qualitative decision making (102) 1
 Qualitative geometric reasoning (104) 211
 Qualitative spatial reasoning (107) 265, (108) 69
 Query containment (101) 227, (104) 165

 Ramification (103) 183
 Ramification Problem (104) 339
 Random polyhedral scenes (105) 47
 Randomized classification algorithms (106) 335
 Rationality (110) 103
 Rationalization (110) 103
 Re-implementation (107) 1
 Reactive control (110) 293
 Reactive systems (103) 5
 Real robot middle-size league (110) 193
 Real robot small-size league (110) 193
 Reasoning (102) 97
 Reasoning about actions (104) 107, (107) 63, (108) 125
 Reasoning about actions and causality (103) 183
 Recovery (103) 5
 Recursive Deterministic Perceptron (102) 295
 Region Connection Calculus (108) 69
 Regression (105) 161
 Regularization method (107) 347
 Reinforcement learning (110) 275
 Repeated tasks (101) 267
 Representing belief (106) 161
 Resource management (101) 135
 RoboCup (110) 193
 RoboCup soccer (110) 215
 Robot programs (101) 201
 Robotic agents (103) 133
 Robotic soccer (110) 241
 Robotics (101) 201

- | | | | |
|---------------------------------------|----------------------|---------------------------------------|---|
| Rough set model | (106) 109 | Task allocation | (101) 165, (110) 1 |
| Rule-based systems | (103) 237 | Teamwork | (110) 215 |
| | | Temporal constraint reasoning | (102) 143 |
| Satisfiability | (102) 21 | Temporal reasoning | (102) 39, (103) 95, (104) 339,
(105) 209, (106) 205, (109) 273 |
| Scalability of behavior-based systems | (110) 293 | Text generation | (105) 263 |
| Scheduling | (103) 5 | Theories of actions | (101) 201 |
| Scientific discovery | (107) 335 | Theory revision | (106) 139, (107) 175 |
| Search | (101) 35, (109) 111 | Threshold approach | (105) 263 |
| Semantic characterizations | (107) 303 | Tractability | (101) 251, (106) 205 |
| Semantic networks | (103) 237 | Tractable subclasses | (108) 69 |
| Semantics of diagnosis | (105) 295 | Traffic surveillance | (103) 77 |
| Semi-Markov decision processes | (105) 209 | Transferable belief model | (105) 345 |
| Sentence–formula proximity | (109) 33 | Transformation | (107) 1 |
| Shenoy–Shafer architecture | (102) 323 | Transition logic | (103) 183 |
| Similarity-based reasoning | (102) 249 | Translingual IR | (103) 323 |
| Simulation league | (110) 193 | TraumAID project | (105) 263 |
| Situation calculus | (101) 201 | Truth | (104) 265 |
| Sketch understanding | (104) 211 | Truth theory | (109) 71 |
| Social agent | (103) 157 | | |
| Social laws | (102) 1 | Uncertain reasoning | (106) 77 |
| Social structures | (103) 157 | Uncertainty | (101) 99, (102) 21, (104) 331 |
| Software agents | (108) 179, (108) 257 | Universal and stipulative constraints | (103) 117 |
| Software migration | (107) 1 | User-adaptive interface | (103) 295 |
| Statistical learning | (103) 323 | Utility estimation | (101) 63 |
| Stratification | (110) 103 | Utility-based search | (101) 267 |
| Substitution | (103) 117 | | |
| Supertagging | (103) 117 | Value minimization | (102) 163, (104) 107 |
| Supertags | (103) 117 | Vision-based learning | (110) 275 |
| Support | (104) 71 | | |
| Symbolic models | (103) 133 | Water quality | (101) 135 |