



# Index

- Accurate Semantic Annotations via Pattern Matching, 375  
aerospace, 18-34  
Aerts, Diederik, 148  
Agent Community Supporting Orbit Determination, An, 32  
Agents with or without Emotions?, 89  
agents, 2-17  
Aha, David W., 95  
Ajmerwala, Yousuf, 232  
Alfonseca, Enrique, 456  
Algorithm for Inducing Least Generalization under Relative Implication, An, 322  
Algorithms for Conditioning on Events of Zero Lower Probability, 248  
Amghar, Y., 471  
Amorim, B. P., 267  
Anand, Sarab, 126  
Andersson, Nils-Peter, 514  
Answer Finding Guided by Question Semantic Constraints, 67  
Application of the Multilevel Process Theory of Emotion to User-Modeling, 78  
Applying Agent Oriented Software Engineering to Cooperative Robotics, 391  
Approach for Semantic Search by Matching RDF Graphs, An, 450  
Assessing Conceptual Similarity to Support Concept Mapping, 168  
automated reasoning, 56-76  
Badr, E. A., 381  
Bandyopadhyay, Sanghamitra, 232  
Bardina, Jorge, 242  
Baumgarten, Matthias, 354  
Baus, Jörg, 461  
Bayesian Approach to Operational Decisions in Transportation Businesses, A, 514  
Beavers, Gordon, 8  
behavioral characteristics and AI systems, 77-93  
Benferhat, Salem, 519  
Bickis, Mikelis, 493  
Biologically Inspired Mechanisms for Processing Sensor Rich Environments, 3  
Biologically-Inspired Agents for Priority Routing in Networks, 282  
Bittner, Thomas, 466  
Bologna, Guido, 264  
Bolohan, Orest, 198  
Borghi, Anna M., 138  
Boycheva, Svetla, 322  
Bracketing Compound Nouns for Logic Form Derivation, 198  
Brasil, L. M., 267  
Bryant, Barrett R., 370  
Budescu, David V., 498  
Burnell, Lisa, 305  
Business-Rules Approach for Departmental Advising, A, 305

- Bussler, Christoph, 419  
 Butakov, Sergei V., 385
- Campos, P. G., 267  
 Cañas, Alberto, 168  
 Carley, Kathleen M., 87  
 Carpentier, François-Gilles, 178  
 case-based reasoning, 94-136  
 categorization and concept representation models and implications, 137-185  
 Categorisation of Actions by Analogy: From the Analysis of Metaphoric Utterances to a Computational Model, 143  
 Category Similarity as a Predictor for SVM Learning Performance, 173  
 Causal Query Elaboration in Conversational Case-Based Reasoning, 95  
 CBROnto: A Task/Method Ontology for CBR, 101  
 Chbeir, R., 471  
 Checking for Dimensional Correctness in Physics Equations, 299  
 Christofides, T., 272  
 Christophides, Vassilis, 430  
 Class of Star-Algebras for Point-Based Qualitative Reasoning in Two-Dimensional Space, A, 486  
 Cluster Analysis in Science and Technology: An Application in Research Group Evaluation, 46  
 Coffey, John W., 289  
 Cohen, Ira, 327  
 Comparing Alternative Methods for Inference in Multiply Sectioned Bayesian Networks, 534  
 Comparison of (Semantic) Markup Languages, A, 413  
 Comparison of Different Techniques for Grounding Near-Propositional CNF Formulae, A, 72  
 Compression-Based Induction and Genome Data, 344  
 Conflict Resolution in Probabilistic Multi-Agent Systems, 529  
 constraint satisfaction and theorem proving, 186-209  
 Contextual Knowledge Representation for Requirements Documents in Natural Language, 370  
 Contextualizing Concepts, 148  
 Cook, Diane J., 232, 349
- Counsell, Steve, 132  
 Cox, Michael T., 62  
 Cozman, Fabio Gagliardi, 248, 327  
 Cross Entropy Error Function in Neural Networks: Forecasting Gasoline Demand, 381
- da Silva, I. G. L., 267  
 Data Integration Using Data Mining Techniques, 332  
 Data Mining: An Empirical Application in Real Estate Valuation, 314  
 Davis, Karen C., 332  
 Davis, Robert B., 332  
 DeLoach, Scott A., 391  
 Design of a Satellite Data Distribution Center, 28  
 Deugo, Dwight, 282  
 Dhami, Mandeep K., 498  
 Di Eugenio, Barbara, 365  
 Di Ferdinando, Andrea, 138  
 Díaz-Agudo, Belén, 101  
 Dimensional Indexing for Targeted Case-Based Retrieval: The SMIRKS System, 62  
 Ding, Ying, 403  
 Domeshek, Eric A., 19  
 Durrett, John R., 305  
 Duvignau, Karine, 143
- educational information technology, 35-55  
 Egenhofer, Max J., 408  
 Eigenvector-Based Feature Extraction for Classification, 354  
 Ekenberg, Love, 514  
 El-Sheikh, Eman, 294  
 Emotions in Intelligent Agents, 82  
 Enhancing Structure Discovery for Data Mining in Graphical Databases Using Evolutionary Programming, 232  
 evaluation of intelligent systems, 210-230  
 Extending Dual Arc Consistency, 192
- Fanguy, Ronnie, 339  
 Far and A WAY: Context Sensitive Service Delivery through Mobile Lightweight PDA Hosted Agents, 13  
 Farrugia, James, 408  
 Fensel, Dieter, 403, 419  
 Figg, Ryan, 305

- Findlater, Leah, 481  
 Flory, A., 471  
 Frames of Reference, Positional Information and Navigational Assistance, 461  
 Framework for Constructing Temporal Models from Texts, A, 456  
 Frank, Martin, 425  
 From the Egg-Yolk to the Scrambled-Egg Theory, 476  
 Fuchs, Matthias, 57  
 Fusion of Possibilistic Knowledge Bases from a Postulate Point of View, 519
- Gabora, Liane, 148  
 Galitsky, Boris, 36  
 Galushka, Mykola, 126  
 Gasquet, Olivier, 143  
 Gaume, Bruno, 143  
 Gayral, Françoise, 153  
 Generating Natural Language Aggregations Using a Propositional Representation of Sets, 365  
 genetic algorithms, 231-246  
 Gerrits, Rik, 221  
 Gil, Yolanda, 413  
 Gineste, Marie-Dominique, 143  
 Giraffa, Lucia M. M., 41  
 Girju, Roxana, 360  
 GoldenBullet in a Nutshell, 403  
 Gonçalves, Alexandre L., 46  
 Gonzalez, Avelino J., 216  
 González-Calero, Pedro A., 101  
 Goodwin, Scott D. 192  
 Granularity in Reference to Spatio-Temporal Location and Relations, 466  
 Grimsley, Michael, 158  
 Guesgen, Hans W., 476  
 Gupta, Kalyan Moy, 95  
 Gureckis, Todd M., 163
- Haller, Susan, 365  
 Hamilton, Howard J., 481  
 Handschuh, Siegfried, 425  
 Hannon, Charles J., 3  
 Hansen, Eric A., 203  
 Hartmann, Jens, 440  
 Henry, Kenneth R., 310  
 Hewett, Rattikorn, 344
- Hexmoor, Henry, 8  
 High Expressive Spatio-Temporal Relations, 471  
 Higher Order Refinement Heuristics for Rule Validation, 211  
 Hoffman, Robert R., 540  
 Holder, Lawrence B., 232  
 Homogeneous Sets of ATP Problems, 57
- Imitating Agent Game Strategies Using a Scalable Markov Model, 349  
 imprecise and indeterminate probabilities, 247-268  
 Indeterminate Probability and Change of View, 503  
 Industrial Application of CBR in Manufacturing to Reduce Rejections, An, 116  
 Inference and Categorization, 153  
 Institutionalizing the Field of Expertise Studies and Its Applications to Computer Science, 540  
 integrated intelligent systems, 263-287  
 Integration of Data Mining and Hybrid Expert System, 267  
 Intelligent Architectures for Knowledge Sharing: A Soar Example and General Issues, 318  
 Intelligent Hybrid Decision Support System for the Management of Water Resources, An, 272  
 interactive tutoring, 288-303
- Jaen, Ruben D., 314  
 Janakiraman, Krishnamoorthy, 332  
 Jantke, Klaus P., 216  
 Jeribi, Lobna, 51  
 Joun, C., 381
- Kaci, Souhila, 519  
 Karelitz, Tzur M., 498  
 Kartseva, Vera, 403  
 Kayser, Daniel, 153  
 Kazeli, H., 272  
 Kelbassa, Hans-Werner, 211  
 Keravnou, E., 272  
 Kern, Vinícius Medina., 46  
 Khemani, Deepak, 116  
 Klein, Michel, 403  
 Klein, Teri E., 344

- Knauf, Rainer, 216
- Knowledge Assets: Governmental Measurement Standards, 310
- knowledge management, 304-320
- Knowledge-Based Instructional Assistant to Accompany LEO: A Learning Environment Organizer, A, 289
- Knowledge-Based Validation Method for Validating Intelligent Systems, 226
- Kolen, John F., 187
- Korotkiy, Maksym, 403
- Kray, Christian, 461
- Kubat, Miroslav, 339
- Kubota, Sen, 237
- Kyburg, Jr., Henry E., 253
- Lacey, Nick, 8
- Larsson, Aron, 514
- Leake, David B., 106, 168
- Learning Structural Classification Rules for Web-Page Categorization, 440
- Lee, Beum-Seuk, 370
- Lee, Philomena Y., 62
- Leuchner, John, 344
- Levi, Isaac, 503
- Li, Jianming, 450
- Li, Yonghua, 391
- Liew, C. W., 299
- Lin, Tao, 529
- Lisetti, Christine L., 78, 397
- Logic of Categorization, The, 181
- Looking Backward, Forward, and All Around: Temporal, Spatial, and Spatio-Temporal Data Mining, 481
- Love, Bradley C., 163
- Lowen, T. D., 13
- machine learning, 321-358
- Maguitman, Ana, 168
- Managing Multiple Case Bases: Dimensions and Issues, 106
- Manandhar, Suresh, 456
- Mapping Technology for Enterprise Integration, 419
- Markov, Zdravko, 322
- Matson, Eric T., 391
- Maulik, Ujjwal, 232
- McGinty, Lorraine, 111
- Meehan, Anthony, 158
- Memory-Bounded A\* Graph Search, 203
- Mendes, Emilia, 132
- Michael, S. M., 116
- Minai, Ali, 332
- Mitra, Debasis, 486
- Modeling and Implementing Intelligent Educational Environments Using an Interdisciplinary Approach, 41
- Modeling Unsupervised Learning with SUS-TAIN, 163
- Modifying Upstart for Use in Multiclass Numerical Domains, 339
- Modular Neuro-Fuzzy Networks Used in Explicit and Implicit Knowledge Integration, 277
- Mohammed, John L., 24
- Moldovan, Dan I., 198, 360
- Mooney, Sean D., 344
- Morales, Aran Bey Tcholakian, 46
- Mosley, Nile, 132
- Nagarajan, Shiv, 192
- Nasoz, Fatma, 78
- Nasr, G. E., 381
- natural language processing, 359-379
- Neagu, Ciprian-Daniel, 277
- Neufeld, Eric, 493
- neural networks, 380-389
- New XML-Based Language for Neural Solution Interchange, A, 385
- Novischi, Adrian, 375
- O'Hare, G. M. P, 13
- O'Hare, P. T., 13
- Object Determination Logic—A Categorization System, 178
- Omelichenko, Borys, 403, 419
- On-Line Satisfiability Algorithm for Conjunctive Normal Form Expressions with Two Literals, An, 187
- Onoyama, Takashi, 226, 237
- Ontology Construction—An Iterative and Dynamic Task, 445
- O'Sullivan, Derry, 121
- Pacheco, Roberto Carlos dos Santos, 46
- Pagurek, Bernard, 282

- Palade, Vasile, 277  
 Parameswaran, Nandan, 82  
 Pardi, Fabio, 173  
 Parisi, Domenico, 138  
 Pasca, Marius, 67  
 Pascu, Anca, 178  
 Patterson, David, 126, 354  
 Pechenizkiy, Mykola, 354  
 Perceptual Scaling in Materials Selection for Concurrent Design, 158  
 Personality, Affect and Emotion Taxonomy for Socially Intelligent Agents, 397  
 Personalizing the Catalogs of Web Portals, On, 430  
 Phan, Minh, 305  
 Philippow, Ilka, 216  
 Pinon, Jean Marie, 51  
 Planning at the Intention Level, 8  
 Prediction of Aerodynamic Coefficients Using Neural Networks for Sparse Data, 242  
 Presentations and Bearers of Semantics on the Web, 408  
 Priest, John, 305  
 Prietula, M. J., 87, 318  
 Proposal and Evaluation of "Selfish-Gene with Limited Allowance" Type GA for Solving Constraint TSP, 237  
 Puuronen, Seppo, 354  
  
 Rajkumar, T., 242  
 Ratnakar, Varun, 413  
 Reasonableness of Necessity, The, 508  
 Requirements for Successful Verification in Practice, 221  
 robotics, 390-401  
 Role of Action in Object Categorization, The, 138  
 Rooney, Niall, 126  
 Rubtsov, Denis V., 385  
 Rumpler, Beatrice, 51  
 Rus, Vasile, 198  
  
 Salecker, Dirk, 216  
 Sandanayake, Priyath T., 349  
 Santos Jr., Eugene, 524  
 Santos, Eugene S., 524  
 Sattar, A., 192  
 Scheutz, Matthias 89  
  
 Scholz, Thorsten, 445  
 Schulten, Ellen, 403  
 Schulz, Stephan, 72  
 Searching for the Knowledge in the Semantic Web, 435  
 Self, Lance, 28  
 semantic web, 402-454  
 Semantic Web Service Architecture — Evolving Web Service Standards toward the Semantic Web, 425  
 Semantics and Knowledge Acquisition in Bayesian Knowledge-Bases, 524  
 Semantics for Interval Probabilities, 253  
 Semi-Formal Representations in Support of Design Coordination, 19  
 Shared Experiences in Personalized Route Planning, 111  
 Shimony, Solomon Eyal, 524  
 Smith, D. E., 299  
 Smith, Justin, 305  
 Smyth, Barry, 111, 121  
 Snow, Paul, 508  
 Sollazzo, Tanja, 425  
 Sooriامurthi, Raja, 106  
 SpaceCAPS: Automated Mission Planning for the TechSat 21 Formation-Flying Cluster Experiment, 24  
 spatiotemporal reasoning, 455-491  
 Spreeuwenberg, Silvie, 221  
 Spyros, Nicolas, 430  
 Staab, Steffen, 425  
 Sticklen, Jon, 294  
 Stojanovic, Ljiljana, 435  
 Stojanovic, Nenad, 425, 435  
 Stuckenschmidt, Heiner, 440  
 Sugihara, Akihiro, 305  
 Sutcliffe, Geoff, 57  
 System Refinement in Practice—Using a Formal Method to Modify Real-Life Knowledge, 216  
  
 TAG Models with Emotion, 87  
 Taniguchi, Yoshio, 226, 237  
 Task-Specific Architecture for the Generation of Intelligent Tutoring Systems, A, 294  
 Tawfik, Ahmed Y., 258  
 Teng, Choh Man, 344  
 Text Mining for Causation Relations, 360

- Triggs, Chris, 132  
 Toward a Universal Translator of Verbal Probabilities, 498  
 Towards Dynamic Maintenance of Retrieval Knowledge in CBR, 126  
 Towards Temporal Reasoning Using Qualitative Probabilities, 258  
 Training of Mental Reasoning: Searching the Works of Literature, On the, 36  
 Trolio, Michael, 365  
 Truszkowski, Walt, 32  
 Tsuruta, Setsuo, 226, 237  
 Tsymbal, Alexey, 354  
 Tzitzikas, Yannis, 430
- uncertain reasoning and imprecise and indeterminate probabilities in AI, 492-512  
 uncertain reasoning, 513-538  
 Unlabeled Data Can Degrade Classification Performance of Generative Classifiers, 327  
 User Modeling and Instance Reuse for Information Retrieval Study Case: Visually Disabled Users Access to Scientific Documents, 51  
 Using CBR to Estimate Development Effort for Web Hypermedia Applications, 132  
 Using Collaborative Filtering Data in Case-Based Recommendation, 121
- Validation of the DIMLP Neural Network, On the, 264  
 van Harmelen, Frank, 440  
 Variation on the Paradox of Two Envelopes, A, 493  
 Visser, Ubbo, 445
- Wache, Holger, 445  
 Wallsten, Thomas S., 498  
 Wang, Pei, 181  
 Watson, Ian, 132  
 White, Tony, 282  
 Wilson, David, 121  
 Wong, S. K. M., 529
- Xiang, Y., 534
- Yu, Yong, 450
- Zhong, Jiwei, 450  
 Zhou, Rong, 203  
 Zhu, Dan, 318  
 Zhu, Haiping, 450  
 Zykov, Volodymyr, 403