

## Список литературы

- [1] A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds., *Soft Computing Systems - Design, Management and Applications*, vol. 87 of *Frontiers in Artificial Intelligence and Applications*, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [2] E. Oja, *Independent component analysis*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, p. 3, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [3] B. de Baets, *Fuzzy set theory - a playground for mathematicians*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, p. 4, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [4] O. Khatib, *Robots for the human and haptic interaction*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, p. 5, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [5] W. B. Langdon, *A hybrid genetic programming neural network classifier for use in drug discovery*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, p. 6, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [6] J. Kacprzyk and S. Zadrony, *Protoforms of linguistic data summaries : Towards more general natural-language-based data mining tools*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, p. 7, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [7] A. H. Sung, *Role of soft computing in internet security*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, p. 8, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [8] Y. Dote, *Neuro-fuzzy control*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 9–10, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [9] J. C. Letelier, G. Martin, J. Mpodozis and J. S. Andrade, *Anticipatory computing with autopoietic and (m r)systems*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, p. 11, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [10] R. Amali, J. Vinney, S. Noroozi and V. Patel, *The use of a back propagation neural network to determine the load distribution on a component*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 15–20, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [11] S. Lee, D. Palmer-Brown, J. Tepper and C. Roadknight, *Performance-guided neural network for rapidly self-organising active network management*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 21–31, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.

- [12] F. Fdez-Riverola and J. Corchado, *An automated hybrid reasoning system for forecasting*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 31–41, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [13] G. Bologna, *Rule extraction from bagged neural networks*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 42–53, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [14] R. Saegusa and S. Hashimoto, *Nonlinear principal component analysis to preserve the order of principal components*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 54–63, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [15] T. Minami and T. Inui, *A neural network model of rule-guided behavior*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 64–73, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [16] R. C. Prudêncio and T. Ludermir, *Selection of models for time series prediction via meta-learning*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 74–83, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [17] W. J. K. Cios and L. S. W. Swiercz, *Spiking neurons in clustering of diabetic retinopathy data*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 84–94, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [18] B. Shekar and R. Natarajan, *A fuzzy relatedness measure for determining interestingness of association rules*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 95–104, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [19] E. Rakus-Andersson and L. Zakrzewski, *Factor analysis with qualitative factors as fuzzy numbers*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 105–114, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [20] J. Astrain, J. Garitagoitia, J. Villadangos, F. Fariña and A. Córdoba, *An imperfect string matching experience using deformed fuzzy automata*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 115–123, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [21] D. Mastropasqua, N. Mosca and F. Zambetta, *An xml-based specification of fuzzy logic controllers*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 124–131, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [22] H. Ishibuchi and T. Yamamoto, *Comparison of fuzzy rule selection criteria for classification problems*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 132–141, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.

- [23] M. D. Cock, *Linguistic hedges: a quantifier based approach*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 142–152, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [24] C. Ferreira, *Analyzing the founder effect in simulated evolutionary processes using gene expression programming*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 153–162, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [25] H. Ishibuchi and T. Yoshida, *Hybrid evolutionary multi-objective optimization algorithms*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 163–172, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [26] K. Wiese and E. Glen, *A permutation based genetic algorithm for rna secondary structure prediction*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 173–182, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [27] S. Hirche, I. Santibanez-Koref and I. Boblan, *Design of strong causal fitness functions*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 183–192, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [28] T. Beker and L. Hadany, *Noise and elitism in evolutionary computation*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 193–203, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [29] J. Letelier, G. Marín, J. Mpodozis and J. Soto-Andrade, *Anticipatory computing with autopoietic and (m,r) systems*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 205–211, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [30] M. Asseraf, *An efficient algorithm in optimal partition problem for trees induction*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 212–220, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [31] G. Weidl, A. Madsen and E. Dahlquist, *Condition monitoring, root cause analysis and decision support on urgency of actions*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 221–230, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [32] C. Zanni, M. L. Goc and C. Frydman, *Towards a unique framework to describe and compare diagnosis approaches*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 231–240, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [33] J. Jedrzejowicz and P. Jedrzejowicz, *Experimental evaluation of the pla-based permutation-scheduling*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 241–250, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.

- [34] G. E. A. P. A. Batista and M. Monard, *A study of k-nearest neighbour as an imputation method*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 251–260, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [35] P. Zegers and M. Sundareshan, *Determining the degree of generalization using an incremental learning algorithm*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 261–270, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [36] J. Knowles and D. Corne, *Towards landscape analyses to inform the design of hybrid local search for the multiobjective quadratic assignment problem*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 271–279, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [37] I. Gokcen, J. Peng and B. Buckles, *Active learning using one-class classification*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 280–289, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [38] P. Dixon, D. Corne and M. Oates, *Enhancing real-world applicability by providing confidence-in-prediction in the xcs classifier system*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 290–299, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [39] N. Kawamae, *Latent semantic indexing based on factor analysis*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 300–308, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [40] C. Veenhuis and M. Köppen, *Document oriented modeling of cellular automata*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 309–320, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [41] A. S. Ali and A. Abraham, *An empirical comparison of kernel selection for support vector machines*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 321–330, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [42] Z. Liu and Y. Xu, *Adaptive support vector classifications*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 331–340, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [43] B. Ribeiro and P. Carvalho, *Mercer’s kernel based learning for fault detection*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 341–350, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [44] S. Mukkamala and A. Sung, *Performance based feature identification for intrusion detection using support vector machines*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 351–364, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.

- [45] I. Mora-Jiménez, A. Lyhyaoui, J. Arenas-García, A. Navia-Vázquez and A. Figueiras-Vidal, *A trainable classifier via  $k$  nearest neighbors*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 365–373, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [46] M. Lenic and P. Kokol, *Combining classifiers with multimethod approach*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 374–383, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [47] C. Maturana and R. Weber, *Feature extraction by distance neural network in classification tasks*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 384–393, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [48] S. C. D. Partridge, *Revealing feature interactions in classification tasks*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 394–403, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [49] S. Zemke, *Ensembles in practice: Predication, estimation, multi-feature and noisy data*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 404–416, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [50] J. Kacprzyk and S. Zadrozny, *Protoforms of linguistic data summaries: Towards more general natural-language-based data mining tools*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 417–425, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [51] J. Aguilar and N. Perozo, *Sparse distributed memory with adaptive threshold*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 426–432, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [52] D. Sharma, *Unilr: An automated fuzzy legal reasoner*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 433–441, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [53] W. Ziarko, *Set approximation quality measures in the variable precision rough set model*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 442–452, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [54] E. H. Jr., E. Hruschka and N. Ebecken, *A data preparation bayesian approach for a clustering genetic algorithm*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 453–461, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [55] A. J. Chervonenkis, *Reconstruction of conditional distribution field based on empirical data*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 462–469, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [56] C. Jakovlevich, *Reconstruction of conditional distribution field based on empirical data*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 462–469, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.

- [57] S. Macedo and E. Mamdani, *Bi-directional flow of information in the softboard architecture*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 470–479, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [58] J. Velásquez, H. Yasuda, T. Aoki and R. Weber, *Voice codification using self organizing maps as data mining tool*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 480–489, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [59] I. G. M. C. Martins, *Identifying patterns of corporate tax payment*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 490–499, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [60] V. Ramos, F. Muge and P. Pina, *Self-organized data and image retrieval as a consequence of inter-dynamic synergistic relationships in artificial ant colonies*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 500–512, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [61] F. Zambetta and G. Catucci, *Designing not-so-dull virtual dolls*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 513–518, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [62] J. Nolan, A. Sood and R. Simon, *Sadisco: A scalable agent discovery and composition mechanism*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 519–528, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [63] S. Gouarderes, G. Gouarderes and P. Delpy, *Maybe - multi-agent yield-based engineering : Improve training in the emergency room chain*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 529–539, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [64] H. Iba, N. Tokui and H. Wakaki, *3d-cg avatar motion design by means of interactive evolutionary computation*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 540–549, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [65] V. Marik and V. Mashkov, *Alliance formation with several coordinators*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 550–564, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [66] R. Baeza-Yates and C. Castillo, *Balancing volume, quality and freshness in web crawling*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 565–572, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [67] N. Angkawattanawit and A. Rungsawang, *Learnable topic-specific web crawler*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 573–582, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [68] M. Rodríguez, *A spatial dimension for searching the world wide web*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 583–592, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.

- [69] E. Morales and C. Gutiérrez, *Building yearbooks with rdf*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 593–601, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [70] M. Jarur and M. Rodríguez, *A non-deterministic versus deterministic algorithm for searching spatial configurations*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 602–611, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [71] M. Marin, *Parallel text query processing using composite inverted lists*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 612–624, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [72] V. Kumar, *Human reasoning in soft computing*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 625–633, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [73] H. do Nascimento and P. Eades, *A focus and constraint-based genetic algorithm for interactive directed graph drawing*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 634–643, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [74] E. Sanchis and M. Castro, *Dialogue act connectionist detection in a spoken dialogue system*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 644–651, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [75] F. Sugimoto and M. Yoneyama, *A trial method to create a natural interaction in interactive genetic algorithm*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 652–662, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [76] P. Navarrete and J. R. del solar, *Eigenspace-based face recognition: A comparative study of different hybrid approaches*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 663–672, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [77] N. A. Oufroukh and E. Colle, *Pattern recognition with ultrasonic sensor using classification methods*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 673–680, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [78] S. Vishwanthan and M. Murty, *Jigsawing : A method to create virtual examples in ocr data*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 690–696, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [79] M. Haindl and S. äimberová, *Model-based restoration of short-exposure solar images*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 697–706, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.

- [80] R. Brouwer, *Using a helper fn to represent the cost function for training drnn's by gradient descent*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 707–714, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [81] S. Torres and J. Pezoa, *Scene-based nonuniformity correction method using the inverse covariance form of the kalman filter*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 715–724, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [82] E. Vera, R. Reeves and S. Torres, *Adaptive bias compensation for non-uniformity correction on infrared focal plane array detectors*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 725–734, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [83] R. Youssif and C. Purdy, *Combining genetic algorithms and neural networks to build a signal pattern classifier*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 735–744, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [84] M. Murakami, M. Yoneyama and K. Shirai, *Accurate human face extraction using genetic algorithm and subspace method*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 745–754, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [85] O. Montiel, O. Castillo, P. Melin and R. Sepulveda, *The evolutionary learning rule for system identification in adaptive finite impulse filters*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 755–764, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [86] M. Köppen, R. V. Garcia, X. Liu and B. Nickolay, *2d-histogram lookup for low-contrast fault processing*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 765–774, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [87] K. Nakamatsu, J. Abe and A. Suzuki, *A railway interlocking safety verification system based on abductive paraconsistent logic programming*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 775–784, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [88] K. Kramer, S. Patzwahl and T. Nacke, *Complete algorithm to realize ci model-based control and monitoring strategies on microcontroller systems*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 785–795, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [89] V. Castilho, M. Nicoletti and M. E. Debs, *Using genetic algorithms for minimizing the production costs of hollow core slabs*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), Frontiers in Artificial Intelligence and Applications Vol. 87, pp. 796–805, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [90] F. Cuppens, F. Autrel, A. Miège and S. Benferhat, *Recognizing malicious intention in an intrusion detection process*, in *Soft Computing Systems - Design, Management and Applications*



- (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 806–817, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
- [91] S. Cheng, Y. Chen, C. Tseng, H. Fu and H. Pao, *A self-growing probabilistic decision-based neural network with applications to anchor/speaker identification*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 818–829, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
  - [92] F. Heinen and F. Osório, *Hycar - a robust hybrid control architecture for autonomous robots*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 830–842, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
  - [93] X. Wang and K. Smith, *Clustering web user interests using self organising maps*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 843–852, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
  - [94] X. Wang, A. Abraham and K. Smith, *Web traffic mining using a concurrent neuro-fuzzy approach*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 853–862, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
  - [95] W. Sunayama and M. Yachida, *Panoramic view system for extracting key sentences based on viewpoints and an application to a search engine*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 863–870, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
  - [96] G. Rumantir, *Frequent flyer points calculator: More than just a table lookup*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 871–880, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
  - [97] M. Sinka and D. Corne, *Web and multimedia applications*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 881–890, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.
  - [98] R. Walker, *Simulating an information ecosystem within the www*, in *Soft Computing Systems - Design, Management and Applications* (A. Abraham, J. Ruiz-del-Solar and M. Köppen, eds.), *Frontiers in Artificial Intelligence and Applications* Vol. 87, pp. 891–900, IOS Press Amsterdam, Berlin, Oxford, Tokyo, Washington D.C., 2002.