Список литературы

[1] Y. Jin, T. Okabe, and B. Sendhoff, Neural network regularization and ensembling using multi-objective evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1–8, Portland, Oregon, 2004, IEEE Press.

[2] M. Farina and M. Gobbi, A fuzzy-optima definition based multiobjective optimization of a racing car tyre-suspension system, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 9–16, Portland, Oregon, 2004, IEEE Press.

[3] R. F. Coelho and P. Bouillard, Pamuc ii for multicriteria optimization of mechanical designs with expert rules, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 17–22, Portland, Oregon, 2004, IEEE Press.

[4] K. Smith, R. Everson, and J. Fieldsend, Dominance measures for multi-objective simulated annealing, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 23–30, Portland, Oregon, 2004, IEEE Press.

[5] D. Deugo and D. Ferguson, Evolution to the xtreme: Evolving evolutionary strategies using a meta-level approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 31–38, Portland, Oregon, 2004, IEEE Press.

[6] Y. ping Chen and D. Goldberg, Convergence time for the linkage learning genetic algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 39–46, Portland, Oregon, 2004, IEEE Press.

[7] D. Arnold, An analysis of evolutionary gradient search, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 47–54, Portland, Oregon, 2004, IEEE Press.

[8] A. Dukkipati, N. M. Musti, and S. Bhatnagar, Cauchy annealing schedule: An annealing schedule for boltzmann selection scheme in evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 55–62, Portland, Oregon, 2004, IEEE Press.

[9] Y. Kobayashi and E. Aiyoshi, Optimization algorithm using multi-agents and reinforcement learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 63–68, Portland, Oregon, 2004, IEEE Press.

[10] J. Tavares, F. Pereira, and E. Costa, Understanding the role of insertion and correction in the evolution of golomb rulers, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 69–76, Portland, Oregon, 2004, IEEE Press.

[11] W. Sheng and X. Liu, A hybrid algorithm for k-medoid clustering of large data sets, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 77–82, Portland, Oregon, 2004, IEEE Press.

[12] Y. Bernstein, X. Li, V. Ciesielski, and A. Song, Multiobjective parsimony enforcement for superior generalisation performance, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 83–89, Portland, Oregon, 2004, IEEE Press.

[13] X. Hu, Y. Shi, and R. Eberhart, Recent advances in particle swarm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 90–97, Portland, Oregon, 2004, IEEE Press.

[14] D. Parrott and X. Li, A particle swarm model for tracking multiple peaks in a dynamic environment using speciation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 98–103, Portland, Oregon, 2004, IEEE Press.

[15] M. O'Neill, A. Brabazon, and C. Adley, The automatic generation of programs for classification problems with grammatical swarm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 104–110, Portland, Oregon, 2004, IEEE Press.

[16] G. V. Dozier, D. Brown, J. Hurley, and K. Cain, Vulnerability analysis of ais-based intrusion detection systems via genetic and particle swarm red teams, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 111–116, Portland, Oregon, 2004, IEEE Press.

[17] G. Kendall and K. Spoerer, Scripting the game of lemmings with a genetic algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 117–124, Portland, Oregon, 2004, IEEE Press.

[18] J. Denzinger, B. Chan, D. Gates, K. Loose, and J. Buchanan, Evolutionary behavior testing of commercial computer games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 125–132, Portland, Oregon, 2004, IEEE Press.

[19] F. Corno, E. Sanchez, and G. Squillero, On the evolution of corewar warriors, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 133–138, Portland, Oregon, 2004, IEEE Press.

[20] N. Cole, S. Louis, and C. Miles, Using a genetic algorithm to tune first-person shooter bots, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 139–145, Portland, Oregon, 2004, IEEE Press.

[21] C. Spieth, F. Streichert, N. Speer, and A. Zell, Utilizing an island model for ea to preserve solution diversity for inferring gene regulatory networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 146–151, Portland, Oregon, 2004, IEEE Press.

[22] C. Spieth, F. Streichert, N. Speer, and A. Zell, A memetic inference method for gene regulatory networks based on s-systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 152–157, Portland, Oregon, 2004, IEEE Press.

[23] J. Rowland, On genetic programming and knowledge discovery in transcriptome data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 158–165, Portland, Oregon, 2004, IEEE Press.

[24] S. Bleuler, A. Prelic, and E. Zitzler, An ea framework for biclustering of gene expression data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 166–173, Portland, Oregon, 2004, IEEE Press.

[25] Z. Ji, A. Chen, and K. Subprasom, Finding multi-objective paths in stochastic networks: A simulation-based genetic algorithm approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 174–180, Portland, Oregon, 2004, IEEE Press.

[26] A. Chen, P. Chootinan, and S. Pravinvongvuth, An evolutionary approach for finding optimal automatic vehicle identification reader locations in transportation networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 181–187, Portland, Oregon, 2004, IEEE Press.

[27] H. Sato, H. Aguirre, and K. Tanaka, Local dominance using polar coordinates to enhance multiobjective evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 188–195, Portland, Oregon, 2004, IEEE Press.

[28] H. Aguirre and K. Tanaka, Insights on properties of multiobjective mnk-landscapes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 196–203, Portland, Oregon, 2004, IEEE Press.

[29] K. Parsopoulos, D. Tasoulis, N. Pavlidis, V. Plagianakos, and M. Vrahatis, Vector evaluated differential evolution for multiobjective optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 204–211, Portland, Oregon, 2004, IEEE Press.

[30] S. Mostaghim, M. Hoffmann, P. H. Koenig, T. Frauenheim, and J. Teich, Molecular force field parametrization using multi-objective evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 212–219, Portland, Oregon, 2004, IEEE Press.

[31] B. Weinberg and E.-G. Talbi, Nfl theorem is unusable on structured classes of problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 220–226, Portland, Oregon, 2004, IEEE Press.

[32] T. English, No more lunch: Analysis of sequential search, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 227–234, Portland, Oregon, 2004, IEEE Press.

[33] M. Koeppen, No-free-lunch theorems and the diversity of algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 235–241, Portland, Oregon, 2004, IEEE Press.

[34] R. Chow, Effects of phenotypic feedback and the coupling of genotypic and phenotypic spaces in genetic searches, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 242–249, Portland, Oregon, 2004, IEEE Press.

[35] J. Schonfeld and D. Ashlock, Comparison of robustness of solutions located by evolutionary computation and other search algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 250–257, Portland, Oregon, 2004, IEEE Press.

[36] G. Greenwood, Differing mathematical perspectives of genotype space in combinatorial problems: Metric spaces vs pretopological spaces, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 258–264, Portland, Oregon, 2004, IEEE Press.

[37] S. Bain, J. Thornton, and A. Sattar, Evolving algorithms for constraint satisfaction, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 265–272, Portland, Oregon, 2004, IEEE Press.

[38] G. V. Dozier, Recurrent distributed constraint satisfaction via genetic and evolutionary societies of hill-climbers, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 273–279, Portland, Oregon, 2004, IEEE Press.

[39] M. Yuchi and J.-H. Kim, Grouping-based evolutionary algorithm: Seeking balance between feasible and infeasible individuals of constrained optimization problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 280–287, Portland, Oregon, 2004, IEEE Press.

[40] S. Venkatraman and G. Yen, A simple elitist genetic algorithm for constrained optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 288–295, Portland, Oregon, 2004, IEEE Press.

[41] P. A. Simionescu, D. G. Beale, and G. V. Dozier, Constrained optimization problem solving using estimation of distribution algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 296–302, Portland, Oregon, 2004, IEEE Press.

[42] Y. Alkhalifah and R. Wainwright, A genetic algorithm applied to graph problems involving subsets of vertices, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 303–308, Portland, Oregon, 2004, IEEE Press.

[43] S. Katare, A. Kalos, and D. West, A hybrid swarm optimizer for efficient parameter estimation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 309–315, Portland, Oregon, 2004, IEEE Press.

[44] Z. Cui, J. Zeng, and X. Cai, A new stochastic particle swarm optimizer, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 316–319, Portland, Oregon, 2004, IEEE Press.

[45] Y. Shuyuan, W. Min, and J. Licheng, A quantum particle swarm optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 320–324, Portland, Oregon, 2004, IEEE Press.

[46] J. Sun, B. Feng, W. Xu, J. Liu, and L. Bao, Particle swarm optimization with particles having quantum behavior, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 325–331, Portland, Oregon, 2004, IEEE Press.

[47] T. Krink, B. Filipic, G. B. Fogel, and R. Thomsen, Noisy optimization problems - a particular challenge for differential evolution?, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 332–339, Portland, Oregon, 2004, IEEE Press.

[48] J. Kennedy, Probability and dynamics in the particle swarm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 340–347, Portland, Oregon, 2004, IEEE Press.

[49] S. Y. Chong and X. Yao, The impact of noise on iterated prisoner's dilemma with multiple levels of cooperation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 348–355, Portland, Oregon, 2004, IEEE Press.

[50] N. Franken and A. Engelbrecht, Pso approaches to co-evolve ipd strategies, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 356–363, Portland, Oregon, 2004, IEEE Press.

[51] P. Hingston and G. Kendall, Learning versus evolution in iterated prisoner's dilemma, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 364–372, Portland, Oregon, 2004, IEEE Press.

[52] A. Mark, B. Sendhoff, and H. Wersing, A decision making framework for game playing using evolutionary optimization and learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 373–380, Portland, Oregon, 2004, IEEE Press.

[53] D. Ashlock, E. youn Kim, and W. von Roeschlaub, Fingerprints: Enabling visualization and automatic analysis of strategies for two player games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 381–387, Portland, Oregon, 2004, IEEE Press.

[54] X. Sun and W. Just, Evolution of strategies in modified sequential assessment games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 388–394, Portland, Oregon, 2004, IEEE Press.

[55] I. Parmee and J. Abraham, Supporting implicit learning via the visualisation of coga multi-objective data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 395–402, Portland, Oregon, 2004, IEEE Press.

[56] A. Hernandez-Aguirre, S. Botello-Rionda, and C. Coello-Coello, Passss: An implementation of a novel diversity strategy for handling constraints, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 403–410, Portland, Oregon, 2004, IEEE Press.

[57] R. Kicinger, T. Arciszewski, and K. De Jong, Morphogenesis and structural design: Cellular automata representations of steel structures in tall buildings, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 411–418, Portland, Oregon, 2004, IEEE Press.

[58] K. Bryden, D. Ashlock, and D. McCorkle, An application of graph based evolutionary algorithms for diversity preservation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 419–426, Portland, Oregon, 2004, IEEE Press.

[59] S. Suram, K. Bryden, and D. Ashlock, Quantitative trait loci based solution of an inverse radiation heat transfer problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 427–432, Portland, Oregon, 2004, IEEE Press.

[60] N. Dorris, B. Carnahan, L. Orsini, and L.-A. Kuntz, Interactive evolutionary design of anthropomorphic symbols, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 433–440, Portland, Oregon, 2004, IEEE Press.

[61] H. Ishibuchi and K. Narukawa, Performance evaluation of simple multiobjective genetic local search algorithms on multiobjective 0/1 knapsack problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 441–448, Portland, Oregon, 2004, IEEE Press.

[62] H. Aguirre and K. Tanaka, Effects of elitism and population climbing on multiobjective mnk-landscapes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 449–456, Portland, Oregon, 2004, IEEE Press.

[63] E. Dunn, G. Olague, E. Lutton, and M. Schoenauer, Pareto optimal sensing strategies for an active vision system, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 457–463, Portland, Oregon, 2004, IEEE Press.

[64] Y. Yun, H. Nakayama, and M. Arakawa, Fitness evaluation using generalized data envelopment analysis in moga, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 464–471, Portland, Oregon, 2004, IEEE Press.

[65] X. H. Nguyen and M. R. Ian, An investigation on the roles of insertion and deletion operators in tree adjoining grammar guided genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 472–477, Portland, Oregon, 2004, IEEE Press.

[66] Y. Shan, R. I. McKay, R. Baxter, H. Abbass, D. Essam, and H. Nguyen, Grammar model-based program evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 478–485, Portland, Oregon, 2004, IEEE Press.

[67] M. Tomassini, L. Vanneschi, J. Cuendet, and F. Fernandez, A new technique for dynamic size populations in genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 486–493, Portland, Oregon, 2004, IEEE Press.

[68] V. Ciesielski and X. Li, Experiments with explicit for-loops in genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 494–501, Portland, Oregon, 2004, IEEE Press.

[69] E. Leon, O. Nasraoui, and J. Gomez, Anomaly detection based on unsupervised niche clustering with application to network intrusion detection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 502–508, Portland, Oregon, 2004, IEEE Press.

[70] A. Teredesai and V. Govindaraju, Issues in evolving gp based classifiers for a pattern recognition task, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 509–515, Portland, Oregon, 2004, IEEE Press.

[71] R. Ouellette, M. Browne, and K. Hirasawa, Genetic algorithm optimization of a convolutional neural network for autonomous crack detection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 516–521, Portland, Oregon, 2004, IEEE Press.

[72] T. Ashburn and E. Bonabeau, Interactive inversion of financial markets agent-based models, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 522–529, Portland, Oregon, 2004, IEEE Press.

[73] D. Devicharan and C. Mohan, Particle swarm optimization with adaptive linkage learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 530–535, Portland, Oregon, 2004, IEEE Press.

[74] L. Cagnina, S. Esquivel, and R. Gallard, Particle swarm optimization for sequencing problems: A case study, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 536–541, Portland, Oregon, 2004, IEEE Press.

[75] Y. Liu, Z. Qin, and X. He, Supervisor-student model in particle swarm optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 542–547, Portland, Oregon, 2004, IEEE Press.

[76] A. Mohais, C. Ward, and C. Posthoff, Randomized directed neighborhoods with edge migration in particle swarm optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 548–555, Portland, Oregon, 2004, IEEE Press.

[77] F. Castillo, J. Sweeney, and W. Zirk, Using evolutionary algorithms to suggest variable transformations in linear model lack-of-fit situations, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 556–560, Portland, Oregon, 2004, IEEE Press.

[78] A. Kordon and C.-T. Lue, Symbolic regression modeling of blown film process effects, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 561–568, Portland, Oregon, 2004, IEEE Press.

[79] B. Filipic and T. Robic, A comparative study of coolant flow optimization on a steel casting machine, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 569–573, Portland, Oregon, 2004, IEEE Press.

[80] P. Jones, A. Tiwari, R. Roy, and J. Corbett, Optimisation of the high efficiency deep grinding process with fuzzy fitness function and constraints, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 574–581, Portland, Oregon, 2004, IEEE Press.

[81] D. Corne and C. Pridgeon, Investigating issues in the reconstructability of genetic regulatory networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 582–589, Portland, Oregon, 2004, IEEE Press.

[82] S.-B. Cho and C. Park, Speciated ga for optimal ensemble classifiers in dna microarray classification, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 590–597, Portland, Oregon, 2004, IEEE Press.

[83] A. Deschenes and K. C. Wiese, Using stacking-energies (inn and inn-hb) for improving the accuracy of rna secondary structure prediction with an evolutionary algorithm - a comparison to known structures, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 598–606, Portland, Oregon, 2004, IEEE Press.

[84] G. B. Fogel, D. G. Weekes, R. Sampath, and D. J. Ecker, Parameter optimization of an evolutionary algorithm for rna structure discovery, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 607–613, Portland, Oregon, 2004, IEEE Press.

[85] M. Kotani and D. Kato, Feature extraction using coevolutionary genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 614–619, Portland, Oregon, 2004, IEEE Press.

[86] K. Y. Chan, E. Aydin, and T. Fogarty, An empirical study on the performance of factorial design based crossover on parametrical problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 620–627, Portland, Oregon, 2004, IEEE Press.

[87] Y. Zou, Z. Zhuang, and H. Chen, Hw-sw partitioning based on genetic algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 628–633, Portland, Oregon, 2004, IEEE Press.

[88] J.-H. Hong and S.-B. Cho, Evolution of emergent behaviors for shooting game characters in robocode, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 634–638, Portland, Oregon, 2004, IEEE Press.

[89] H. de Garis and T. Batty, Robust, reversible, nano-scale, femto-second-switching circuits and their evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 639–645, Portland, Oregon, 2004, IEEE Press.

[90] T. Hatanaka, Y. Kawaguchi, and K. Uosaki, Nonlinear system identification based on evolutionary fuzzy modeling, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 646–651, Portland, Oregon, 2004, IEEE Press.

[91] A. Brabazon, A. Silva, T. F. de Sousa, M. O'Neill, R. Matthews, and E. Costa, Investigating organizational strategic inertia using a particle swarm model, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 652–659, Portland, Oregon, 2004, IEEE Press.

[92] C. Gutierrez, Heuristics in a general scheduling problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 660–665, Portland, Oregon, 2004, IEEE Press.

[93] W. Gao, Fast immunized evolutionary programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 666–670, Portland, Oregon, 2004, IEEE Press.

[94] D. Cohen, Using sat scores as predictors for future academic success, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 671–677, Portland, Oregon, 2004, IEEE Press.

[95] H. Chung-Yuan and S. Chuen-Tsai, Self-adaptive routing based on learning classifier systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 678–682, Portland, Oregon, 2004, IEEE Press.

[96] S. Eto, K. Hirasawa, and J. Hu, Functional localization of genetic network programming and its application to a pursuit problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 683–690, Portland, Oregon, 2004, IEEE Press.

[97] O. Bandte, Visualizing information in an interactive evolutionary design process, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 691–698, Portland, Oregon, 2004, IEEE Press.

[98] M. De San Pedro, D. Pandolfi, A. Villagra, M. Lasso, and R. Gallard, Effect of crossover operators under multirecombination: Weighted tardiness, a test case, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 699–705, Portland, Oregon, 2004, IEEE Press.

[99] J. Zheng, C. X. Ling, Z. Shi, and Y. Xie, Some discussions about mogas: Individual relations, non-dominated set, and application on automatic negotiation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 706–712, Portland, Oregon, 2004, IEEE Press.

[100] H. Nakagoe, K. Hirasawa, and J. Hu, Genetic network programming with automatically generated variable size macro nodes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 713–719, Portland, Oregon, 2004, IEEE Press.

[101] K. Sastry, M. Pelikan, and D. Goldberg, Efficiency enhancement of genetic algorithms via building-block-wise fitness estimation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 720–727, Portland, Oregon, 2004, IEEE Press.

[102] M. Kleeman, R. Day, and G. Lamont, Multi-objective evolutionary search performance with explicit building-block sizes for npc problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 728–735, Portland, Oregon, 2004, IEEE Press.

[103] T. Ferreira, G. Vasconcelos, and P. Adeodato, A hybrid intelligent system approach for improving the prediction of real world time series, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 736–743, Portland, Oregon, 2004, IEEE Press.

[104] J. Chen and M. Wineberg, Enhancement of the shifting balance genetic algorithm for highly multimodal problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 744–751, Portland, Oregon, 2004, IEEE Press.

[105] P. E. Hotz, Comparing direct and developmental encoding schemes in artificial evolution: A case study in evolving lens shapes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 752–757, Portland, Oregon, 2004, IEEE Press.

[106] P. Osmera, Evolvable controllers with hierarchical structure, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 758–765, Portland, Oregon, 2004, IEEE Press.

[107] G. Parker and J. Blumenthal, Varying sample sizes for the co-evolution of heterogeneous agents, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 766–771, Portland, Oregon, 2004, IEEE Press.

[108] H. Hou and G. V. Dozier, Comparing performance of binary-coded and constraint-based detectors, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 772–777, Portland, Oregon, 2004, IEEE Press.

[109] C. kin Chow and H. tat Tsui, Autonomous agent response learning by a multi-species particle swarm optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 778–785, Portland, Oregon, 2004, IEEE Press.

[110] M. Daneshyari and G. Yen, Talent based social algorithm for optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 786–791, Portland, Oregon, 2004, IEEE Press.

[111] B. S. and P. N. Suganthan, A novel concurrent particle swarm optimization (cpso), in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 792–796, Portland, Oregon, 2004, IEEE Press.

[112] J. Isaacs and S. Foo, Optimized wavelet hand pose estimation for american sign language recognition, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 797–802, Portland, Oregon, 2004, IEEE Press.

[113] Z. Wu, Z. Tang, J. Zou, L. Kang, and M. Li, An evolutionary algorithm for solving parameter identification problems in elliptic systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 803–808, Portland, Oregon, 2004, IEEE Press.

[114] B. Eskridge and D. Hougen, Imitating success: A memetic crossover operator for genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 809–815, Portland, Oregon, 2004, IEEE Press.

[115] H. de Garis and T. Batty, "multi-mod": A pc based software system for handling the interconnectivity and neural signaling of an artificial brain containing 10,000 evolved neural net modules, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 816–819, Portland, Oregon, 2004, IEEE Press.

[116] Y. Shuyuan, W. Min, and J. Licheng, A novel quantum evolutionary algorithm and its application, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 820–826, Portland, Oregon, 2004, IEEE Press.

[117] S. Ando and H. Iba, Estimation of gene network using real-coded ga and robustness analysis, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 827–834, Portland, Oregon, 2004, IEEE Press.

[118] S. Gordon and Z. Matley, Evolving sparse direction maps for maze pathfinding, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 835–838, Portland, Oregon, 2004, IEEE Press.

[119] J. Oh and D. Volper, Design of rationality-based computing middleware: A preliminary study, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 839–846, Portland, Oregon, 2004, IEEE Press.

[120] A. Augugliaro, L. Dusonchet, S. Favuzza, and E. R. Sanseverino, A fuzzy-logic based evolutionary multiobjective approach for automated distribution networks management, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 847–854, Portland, Oregon, 2004, IEEE Press.

[121] S. Kimbrough, M. Lu, and S. Safavi, Exploring a financial product model with a two-population genetic algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 855–862, Portland, Oregon, 2004, IEEE Press.

[122] M. Neal and F. Labrosse, Rotation-invariant appearance based maps for robot navigation using an artificial immune network algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 863–870, Portland, Oregon, 2004, IEEE Press.

[123] E. Sanchez, G. Squillero, and M. Violante, A local analysis of the genotype-fitness mapping in hardware optimization problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 871–878, Portland, Oregon, 2004, IEEE Press.

[124] S. Esquivel, M. Garcia, G. Leguizamon, and M. Ribba, A comparison of two mutation operators for the path planning problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 879–883, Portland, Oregon, 2004, IEEE Press.

[125] K. Uosaki, Y. Kimura, and T. Hatanaka, Evolution strategies based particle filters for state and parameter estimation of nonlinear models, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 884–890, Portland, Oregon, 2004, IEEE Press.

[126] M. Sinka and D. Corne, Evolving document features for web document clustering: A feasability study, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 891–897, Portland, Oregon, 2004, IEEE Press.

[127] K. Yong-Duk, K. Jong-Hwan, and K. Yong-Jae, Behavior selection and learning for synthetic character, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 898–903, Portland, Oregon, 2004, IEEE Press.

[128] F. Neumann, Expected runtimes of evolutionary algorithms for the eulerian cycle problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 904–910, Portland, Oregon, 2004, IEEE Press.

[129] U. Chakraborty, Analysis of encoding in 1+1-ea, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 911–917, Portland, Oregon, 2004, IEEE Press.

[130] R. Salomon, The curse of high-dimensional search spaces: Observing premature convergence in unimodal functions, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 918–923, Portland, Oregon, 2004, IEEE Press.

[131] S. Verel, P. Collard, and M. Clergue, Scuba search: when selection meets innovation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 924–931, Portland, Oregon, 2004, IEEE Press.

[132] F. Streichert, H. Ulmer, and A. Zell, Evaluating a hybrid encoding and three crossover operators on the constrained portfolio selection problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 932–939, Portland, Oregon, 2004, IEEE Press.

[133] J. J. Korczak and P. Lipinski, Evolutionary building of stock trading experts in a real-time system, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 940–947, Portland, Oregon, 2004, IEEE Press.

[134] S. Hayward, Setting up performance surface of an artificial neural network with genetic algorithm optimization: in search of an accurate and profitable prediction for stock trading, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 948–954, Portland, Oregon, 2004, IEEE Press.

[135] M. Tanaka-Yamawaki and T. Motoyama, Predicting the tick-wise price fluctuations by means of evolutional computation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 955–958, Portland, Oregon, 2004, IEEE Press.

[136] R. A. Krohling, F. Hoffmann, and L. dos Santos Coelho, Co-evolutionary particle swarm optimization for min-max problems using gaussian distribution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 959–964, Portland, Oregon, 2004, IEEE Press.

[137] D. Krusienski and W. K. Jenkins, Particle swarm optimization for adaptive iir filter structures, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 965–970, Portland, Oregon, 2004, IEEE Press.

[138] W. Slade, H. Ressom, M. Musavi, and R. Miller, Ocean color inversion by particle swarm optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 971–977, Portland, Oregon, 2004, IEEE Press.

[139] E. Miguelanez, A. Zalzala, and P. Tabor, Evolving neural networks using swarm intelligence for binmap classification, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 978–985, Portland, Oregon, 2004, IEEE Press.

[140] G. Yannakakis, J. Levine, and J. Hallam, An evolutionary approach for interactive computer games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 986–993, Portland, Oregon, 2004, IEEE Press.

[141] J. Fletcher and M. Zwick, Hamilton's rule applied to reciprocal altruism, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 994–1000, Portland, Oregon, 2004, IEEE Press.

[142] M. Daoud, N. Kharma, A. Haidar, and J. Popoola, Ayo, the awari player, or how better representation trumps deeper search, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1001–1006, Portland, Oregon, 2004, IEEE Press.

[143] S. Lucas, Cellz: A simple dynamic game for testing evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1007–1014, Portland, Oregon, 2004, IEEE Press.

[144] G.-Z. Zhang and D.-S. Huang, Radial basis function neural network optimized by ga for soybean protein sequence residue spatial distance prediction, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1015–1019, Portland, Oregon, 2004, IEEE Press.

[145] R. Day and G. Lamont, Force field approximations using artificial neural networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1020–1027, Portland, Oregon, 2004, IEEE Press.

[146] J.-M. Yang and T.-W. Shen, A pharmacophore-based evolutionary approach for screening estrogen receptor antagonists, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1028–1035, Portland, Oregon, 2004, IEEE Press.

[147] G. Lamont, M. Esslinger, R. Ewing, and H. Abdel-Aty-Zohdy, An artificial immune system strategy for robust chemical spectra classification via distributed heterogeneous sensors, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1036–1043, Portland, Oregon, 2004, IEEE Press.

[148] J. Timmis, C. Edmonds, and J. Kelsey, Assessing the performance of two immune inspired algorithms and a hybrid genetic algorithm for function optimisation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1044–1051, Portland, Oregon, 2004, IEEE Press.

[149] S. Garrett, Parameter-free, adaptive clonal selection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1052–1058, Portland, Oregon, 2004, IEEE Press.

[150] F. de Paula, L. de Castro, and P. de Geus, An intrusion detection system using ideas from the immune system, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1059–1066, Portland, Oregon, 2004, IEEE Press.

[151] J. Hamaker and L. Boggess, Non-euclidean distance measures in airs, an artificial immune classification system, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1067–1073, Portland, Oregon, 2004, IEEE Press.

[152] G. Nicosia, V. Cutello, and M. Pavone, An immune algorithm with hyper-macromutations for the 2d hydrophilic-hydrophobic model, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1074–1080, Portland, Oregon, 2004, IEEE Press.

[153] Z. Ji and D. Dasgupta, Augmented negative selection algorithm with variable-coverage detectors, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1081–1088, Portland, Oregon, 2004, IEEE Press.

[154] C. Anderson, E. Bonabeau, and J. Scott, Evolutionary testing as both a testing and redesign tool: a study of a shipboard firemain's valve and pump controls, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1089–1097, Portland, Oregon, 2004, IEEE Press.

[155] S. Malinchik, B. Orme, J. Rothermich, and E. Bonabeau, Interactive exploratory data analysis, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1098–1104, Portland, Oregon, 2004, IEEE Press.

[156] E. Fernandez, M. Grana, and J. Ruiz-Cabello, An instantaneous memetic algorithm for illumination correction, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1105–1110, Portland, Oregon, 2004, IEEE Press.

[157] T. Bartz-Beielstein and S. Markon, Tuning search algorithms for real-world applications: A regression tree based approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1111–1118, Portland, Oregon, 2004, IEEE Press.

[158] R. Salomon, The force model: Concept, behavior, interpretation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1119–1126, Portland, Oregon, 2004, IEEE Press.

[159] G. Lee, V. Bulitko, and I. Levner, Automated selection of vision operator libraries with evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1127–1134, Portland, Oregon, 2004, IEEE Press.

[160] K. P. Dahal, T. A. Siewierski, S. J. Galloway, G. M. Burt, and J. R. McDonald, An evolutionary generation scheduling in an open electricity market, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1135–1142, Portland, Oregon, 2004, IEEE Press.

[161] M. Lasso, D. Pandolfi, M. De San Pedro, A. Villagra, and R. Gallard, Solving dynamic tardiness problems in single machine environments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1143–1149, Portland, Oregon, 2004, IEEE Press.

[162] S. Tsutsui and G. Wilson, Solving capacitated vehicle routing problems using edge histogram based sampling algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1150–1157, Portland, Oregon, 2004, IEEE Press.

[163] M. Aldasht, J. Ortega, C. G. Puntonet, and A. F. Diaz, A genetic exploration of dynamic load balancing algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1158–1163, Portland, Oregon, 2004, IEEE Press.

[164] Y. Dandass, Genetic list scheduling for soft real-time parallel applications, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1164–1171, Portland, Oregon, 2004, IEEE Press.

[165] S. H. Aleti and H. de Garis, Evolutionary algorithms based on machine learning accelerate mathematical function optimization but not neural net evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1172–1177, Portland, Oregon, 2004, IEEE Press.

[166] J. Hu and E. Goodman, Wireless access point configuration by genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1178–1184, Portland, Oregon, 2004, IEEE Press.

[167] A. Burian and J. Takala, Evolved gate arrays for image restoration, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1185–1192, Portland, Oregon, 2004, IEEE Press.

[168] S. Habib and A. Parker, Synthesizing complex multimedia network topologies using an evolutionary approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1193–1200, Portland, Oregon, 2004, IEEE Press.

[169] Y. Inoue, T. Tohge, and H. Iba, Object transportation by two humanoid robots using cooperative learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1201–1208, Portland, Oregon, 2004, IEEE Press.

[170] R. L. Walker, Honeybee search strategies: Adaptive exploration of an information ecosystem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1209–1216, Portland, Oregon, 2004, IEEE Press.

[171] J. Daida, M. Samples, B. Hart, J. Halim, and A. Kumar, Demonstrating constraints to diversity with a tunably difficulty problem for genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1217–1224, Portland, Oregon, 2004, IEEE Press.

[172] J. Daida, D. Ward, A. Hilss, S. Long, and M. Hodges, Visualizing the loss of diversity in genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1225–1232, Portland, Oregon, 2004, IEEE Press.

[173] Y. Katada, K. Ohkura, and K. Ueda, The nei's standard genetic distance in artificial evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1233–1239, Portland, Oregon, 2004, IEEE Press.

[174] G. Hernandez, D. Dasgupta, F. Nino, and J. Garcia, On geometric and statistical properties of the attractors of a generic evolutionary algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1240–1247, Portland, Oregon, 2004, IEEE Press.

[175] J. He, X. Yao, and Q. Zhang, To understand one-dimensional continuous fitness landscapes by drift analysis, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1248–1253, Portland, Oregon, 2004, IEEE Press.

[176] A. Di Pietro, L. While, and L. Barone, Applying evolutionary algorithms to problems with noisy, time-consuming fitness functions, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1254–1261, Portland, Oregon, 2004, IEEE Press.

[177] S. Yang, Constructing dynamic test environments for genetic algorithms based on problem difficulty, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1262–1269, Portland, Oregon, 2004, IEEE Press.

[178] L. Schoenemann, The impact of population sizes and diversity on the adaptability of evolution strategies in dynamic environments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1270–1277, Portland, Oregon, 2004, IEEE Press.

[179] R. Tinos and A. Carvalho, A genetic algorithm with gene dependent mutation probability for non-stationary optimization problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1278–1285, Portland, Oregon, 2004, IEEE Press.

[180] L. Kang, A. Zhou, R. I. McKay, Y. Li, and Z. Kang, Benchmarking algorithms for dynamic travelling salesman problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1286–1292, Portland, Oregon, 2004, IEEE Press.

[181] R. Eriksson and B. Olsson, On the performance of evolutionary algorithms with life-time adaptation in dynamic fitness landscapes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1293–1300, Portland, Oregon, 2004, IEEE Press.

[182] D. Bonino, F. Corno, and G. Squillero, Dynamic optimization of semantic annotation relevance, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1301–1308, Portland, Oregon, 2004, IEEE Press.

[183] A. Hernandez-Aguirre and C. Coello-Coello, Mutual information-based fitness functions for evolutionary circuit synthesis, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1309–1316, Portland, Oregon, 2004, IEEE Press.

[184] B. Sarif, M. Abd-El-Barr, S. M. Sait, and U. Al-Saiari, Fuzzified ant colony optimization algorithm for efficient combinational circuits, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1317–1324, Portland, Oregon, 2004, IEEE Press.

[185] A. Cruz, A hybrid deterministic/genetic test generator to improve fault, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1325–1330, Portland, Oregon, 2004, IEEE Press.

[186] B. Simsek, S. Albayrak, and A. Korth, Reinforcement learning for procurement agents of the factory of the future, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1331–1337, Portland, Oregon, 2004, IEEE Press.

[187] K. Sedighi, K. Ashenayi, T. Manikas, H.-M. Tai, and R. Wainwright, Autonomous local path-planning for a mobile robot using a genetic algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1338–1345, Portland, Oregon, 2004, IEEE Press.

[188] S. Hati and S. Sengupta, A ga-based integrated approach to model-assisted matching and pose estimation for automated visual inspection applications, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1346–1353, Portland, Oregon, 2004, IEEE Press.

[189] D. Cohen, Ea-lect: An evolutionary algorithm for constructing logical rules to predict election into cooperstown, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1354–1361, Portland, Oregon, 2004, IEEE Press.

[190] S. Tongchim and X. Yao, Parallel evolutionary programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1362–1367, Portland, Oregon, 2004, IEEE Press.

[191] E. Santos and T. Ohishi, A hydro unit commitment model using genetic algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1368–1374, Portland, Oregon, 2004, IEEE Press.

[192] E. Ozcan and E. Onbasioglu, Genetic algorithms for parallel code optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1375–1381, Portland, Oregon, 2004, IEEE Press.

[193] R. Thomsen, Multimodal optimization using crowding-based differential evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1382–1389, Portland, Oregon, 2004, IEEE Press.

[194] S. Doctor, G. Venayagamoorthy, and V. Gudise, Optimal pso for collective robotic search applications, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1390–1395, Portland, Oregon, 2004, IEEE Press.

[195] G. T. Pulido and C. Coello-Coello, A constraint-handling mechanism for particle swarm optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1396–1403, Portland, Oregon, 2004, IEEE Press.

[196] S. Mostaghim and J. Teich, Covering pareto-optimal fronts by subswarms in multi-objective particle swarm optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1404–1411, Portland, Oregon, 2004, IEEE Press.

[197] M. F. Tasgetiren, M. Sevkli, Y.-C. Liang, and G. Gencyilmaz, Particle swarm optimization algorithm for single machine total weighted tardiness problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1412–1419, Portland, Oregon, 2004, IEEE Press.

[198] D. B. Fogel, T. Hays, and D. Johnson, A platform for evolving characters in competitive games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1420–1426, Portland, Oregon, 2004, IEEE Press.

[199] D. B. Fogel, Evolving strategies in blackjack, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1427–1434, Portland, Oregon, 2004, IEEE Press.

[200] S. Gordon and T. Slocum, The knight's tour - evolutionary vs. depth-first search, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1435–1440, Portland, Oregon, 2004, IEEE Press.

[201] C. Miles, S. Louis, N. Cole, and J. McDonnell, Learning to play like a human: Case injected genetic algorithms for strategic computer gaming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1441–1448, Portland, Oregon, 2004, IEEE Press.

[202] Z. Guo and K. Mak, A heuristic ga for the stochastic vehicle routing problems with soft time windows, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1449–1456, Portland, Oregon, 2004, IEEE Press.

[203] J.-D. Wei and D.-T. Lee, A new approach to the traveling salesman problem using genetic algorithms with priority encoding, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1457–1464, Portland, Oregon, 2004, IEEE Press.

[204] Y. Nagata, Criteria for designing crossovers for tsp, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1465–1472, Portland, Oregon, 2004, IEEE Press.

[205] C. White and G. Yen, A hybrid evolutionary algorithm for traveling salesman problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1473–1478, Portland, Oregon, 2004, IEEE Press.

[206] J. M. de la Cruz-Garcia, J. L. Risco-Martin, A. Herran-Gonzalez, and P. Fernandez-Blanco, Hybrid heuristic and mathematical programming in oil pipelines networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1479–1486, Portland, Oregon, 2004, IEEE Press.

[207] C. Dimopoulos, A review of evolutionary multiobjective optimization applications in the area of production research, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1487–1494, Portland, Oregon, 2004, IEEE Press.

[208] T. Wong, P. Cote, and R. Sabourin, A hybrid moea for the capacitated exam proximity problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1495–1501, Portland, Oregon, 2004, IEEE Press.

[209] R. Day, M. Kleeman, and G. Lamont, Multi-objective fast messy genetic algorithm solving deception problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1502–1509, Portland, Oregon, 2004, IEEE Press.

[210] J. C. Hernandez, P. Isasi, and A. Seznec, On the design of state-of-the-art pseudorandom number generators by means of genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1510–1516, Portland, Oregon, 2004, IEEE Press.

[211] J. A. Clark, J. L. Jacob, and S. Stepney, Searching for cost functions, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1517–1524, Portland, Oregon, 2004, IEEE Press.

[212] J. Fuller, W. Millan, and E. Dawson, Multi-objective optimisation of bijective s-boxes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1525–1532, Portland, Oregon, 2004, IEEE Press.

[213] J. A. Clark, J. L. Jacob, and S. Stepney, The design of s-boxes by simulated annealing, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1533–1537, Portland, Oregon, 2004, IEEE Press.

[214] C. Oh and G. Barlow, Autonomous controller design for unmanned aerial vehicles using multi-objective genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1538–1545, Portland, Oregon, 2004, IEEE Press.

[215] H. Liu and H. Iba, A hierarchical approach for adaptive humanoid robot control, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1546–1553, Portland, Oregon, 2004, IEEE Press.

[216] P. Walsh and P. Fenton, A high-throughput computing environment for job shop scheduling genetic algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1554–1560, Portland, Oregon, 2004, IEEE Press.

[217] L. Gonzalez and J. Cannady, A self-adaptive negative selection approach for anomaly detection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1561–1568, Portland, Oregon, 2004, IEEE Press.

[218] H. Ulmer, F. Streichert, and A. Zell, Evolution strategies with controlled model assistance, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1569–1576, Portland, Oregon, 2004, IEEE Press.

[219] K. S. Won and T. Ray, Performance of kriging and cokriging based surrogate models within the unified framework for surrogate assisted optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1577–1585, Portland, Oregon, 2004, IEEE Press.

[220] Z. Zhou, Y. S. Ong, and P. B. Nair, Hierarchical surrogate-assisted evolutionary optimization framework, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1586–1593, Portland, Oregon, 2004, IEEE Press.

[221] T. Okabe, Y. Jin, B. Sendhoff, and M. Olhofer, Voronoi-based estimation of distribution algorithm for multi-objective optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1594–1601, Portland, Oregon, 2004, IEEE Press.

[222] D. Doty, Non-local evolutionary adaptation in gridplants, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1602–1609, Portland, Oregon, 2004, IEEE Press.

[223] R. Johnson, M. Melich, Z. Michalewicz, and M. Schmidt, Coevolutionary tempo game, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1610–1617, Portland, Oregon, 2004, IEEE Press.

[224] D. Ashlock, S. Willson, and N. Leahy, Coevolution and tartarus, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1618–1624, Portland, Oregon, 2004, IEEE Press.

[225] C. O'Riordan, J. Griffith, J. Newell, and H. Sorensen, Co-evolution of strategies for an n-player dilemma, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1625–1630, Portland, Oregon, 2004, IEEE Press.

[226] N. Speer, C. Spieth, and A. Zell, A memetic co-clustering algorithm for gene expression profiles and biological annotation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1631–1638, Portland, Oregon, 2004, IEEE Press.

[227] W. Piaseczny, H. Suzuki, and H. Sawai, Chemical genetic programming - evolution of amino acid rewriting rules used for genotype-phenotype translation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1639–1646, Portland, Oregon, 2004, IEEE Press.

[228] D. Seo, M. Yasunaga, and J. H. Kim, A computatioal approach to detect transcritpion regulatory elements in dictyostelium discoideum, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1647–1653, Portland, Oregon, 2004, IEEE Press.

[229] S. Ding, J. Liu, C. Wu, and Q. Yang, A genetic algorithm applied to optimal gene subset selection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1654–1660, Portland, Oregon, 2004, IEEE Press.

[230] T. Eguchi, K. Hirasawa, J. Hu, and S. Markon, Elevator group supervisory control systems using genetic network programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1661–1667, Portland, Oregon, 2004, IEEE Press.

[231] J. J. Sanchez, M. Galan, and E. Rubio, Genetic algorithms and cellular automata: A new architecture for traffic light cycles optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1668–1674, Portland, Oregon, 2004, IEEE Press.

[232] Y. Katsumata and T. Terano, Cabling and scheduling for electric power plant operation via tabu-boa algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1675–1682, Portland, Oregon, 2004, IEEE Press.

[233] I. Watanabe and M. Nodu, A genetic algorithm for optimizing switching sequence of service restoration in distribution systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1683–1690, Portland, Oregon, 2004, IEEE Press.

[234] P. Ross, J. G. Marin-Blazquez, and E. Hart, Hyper-heuristics applied to class and exam timetabling problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1691–1698, Portland, Oregon, 2004, IEEE Press.

[235] P. Funes, E. Bonabeau, J. Herve, and Y. Morieux, Interactive multi-participant task allocation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1699–1705, Portland, Oregon, 2004, IEEE Press.

[236] J. Pfaffmann, K. Bousmalis, and S. Colombano, A scouting-inspired evolutionary algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1706–1712, Portland, Oregon, 2004, IEEE Press.

[237] D. Ashlock, K. Bryden, and S. Corns, On taxonomy of evolutionary computation problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1713–1719, Portland, Oregon, 2004, IEEE Press.

[238] J. Gomez, Self adaptation of operator rates in evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1720–1726, Portland, Oregon, 2004, IEEE Press.

[239] J. Gomez, Evolution of fuzzy rule based classifiers, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1727–1734, Portland, Oregon, 2004, IEEE Press.

[240] J. Zhang, X. Yuan, and B. Buckles, Subspace fdc for sharing distance estimation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1735–1742, Portland, Oregon, 2004, IEEE Press.

[241] Z. Kobti, R. G. Reynolds, and T. Kohler, The effect of kinship cooperation learning strategy and culture on the resilience of social systems in the village multi-agent simulation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1743–1750, Portland, Oregon, 2004, IEEE Press.

[242] B. Peng and R. G. Reynolds, Cultural algorithms: Knowledge learning in dynamic environments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1751–1758, Portland, Oregon, 2004, IEEE Press.

[243] N. B. Ho and J. C. Tay, Genace: An efficient cultural algorithm to solve the flexible job-shop problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1759–1766, Portland, Oregon, 2004, IEEE Press.

[244] D. Curran and C. O'Riordan, The effect of noise on the performance of cultural evolution in multi-agent systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1767–1773, Portland, Oregon, 2004, IEEE Press.

[245] C. Stephan and J. Sullivan, An agent-based hydrogen vehicle/infrastructure model, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1774–1779, Portland, Oregon, 2004, IEEE Press.

[246] D. Ostrowski and R. G. Reynolds, Using cultural algorithms to evolve strategies for recessionary markets, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1780–1785, Portland, Oregon, 2004, IEEE Press.

[247] A. Stoica, T. Arslan, D. Keymeulen, V. Duong, R. Zebulum, X. Guo, I. Ferguson, and T. Daud, Evolutionary recovery of electronic circuits from radiation induced faults, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1786–1793, Portland, Oregon, 2004, IEEE Press.

[248] S. M. Sait and M. Al-Ismail, Enhanced simulated evolution algorithm for digital circuit design yielding faster execution in a larger solution space, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1794–1799, Portland, Oregon, 2004, IEEE Press.

[249] S. Harding and J. Miller, Evolution in materio : A tone discriminator in liquid crystal, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1800–1807, Portland, Oregon, 2004, IEEE Press.

[250] D. Hunter, Some lessons learned on constructing an automated testbench for evolvable hardware experiments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1808–1812, Portland, Oregon, 2004, IEEE Press.

[251] M. Oltean, Solving even-parity problems using traceless genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1813–1819, Portland, Oregon, 2004, IEEE Press.

[252] J. Blumenthal and G. Parker, Punctuated anytime learning for evolving multi-agent capture strategies, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1820–1827, Portland, Oregon, 2004, IEEE Press.

[253] A. Bajurnow and V. Ciesielski, Layered learning for evolving goal scoring behavior in soccer players, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1828–1835, Portland, Oregon, 2004, IEEE Press.

[254] E. Eberbach and A. Eberbach, On designing co$t: A new approach and programming environment for distributed problem solving based on evolutionary computation and anytime algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1836–1843, Portland, Oregon, 2004, IEEE Press.

[255] D. Ashlock and J. Lathrop, Program induction: Building a wall, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1844–1850, Portland, Oregon, 2004, IEEE Press.

[256] P. Hartono, S. Hashimoto, and M. Wahde, Labeled-ga with adaptive mutation rate, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1851–1858, Portland, Oregon, 2004, IEEE Press.

[257] D. Ashlock and J. Oftelie, Simulation of floral specialization in bees, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1859–1864, Portland, Oregon, 2004, IEEE Press.

[258] D. Kephart and J. Lefevre, Codegen: The generation and testing of dna code words, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1865–1873, Portland, Oregon, 2004, IEEE Press.

[259] M. Khabzaoui, C. Dhaenens, and E.-G. Talbi, A multicriteria genetic algorithm to analyze dna microarray data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1874–1881, Portland, Oregon, 2004, IEEE Press.

[260] M. Nuser and R. Deaton, A probabilistic analysis of in vitro selection of independent dna words for computation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1882–1888, Portland, Oregon, 2004, IEEE Press.

[261] A. Neel, M. Garzon, and P. Penumetsa, Soundness and quality of semantic retrieval in dna-based memories with abiotic data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1889–1895, Portland, Oregon, 2004, IEEE Press.

[262] D. Wood and J. Chen, Fredkin gate circuits via recombination enzymes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1896–1900, Portland, Oregon, 2004, IEEE Press.

[263] C.-H. Chiang and L.-H. Chen, A new cellular automaton: Five elements balance chart and its application to forest industry ecosystem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1901–1908, Portland, Oregon, 2004, IEEE Press.

[264] A. Acan, Clonal selection algorithm with operator multiplicity, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1909–1915, Portland, Oregon, 2004, IEEE Press.

[265] M. Randall, Heuristics for ant colony optimisation using the generalised assignment problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1916–1923, Portland, Oregon, 2004, IEEE Press.

[266] M. Ippolito, E. R. Sanseverino, and F. Vuinovich, Multiobjective ant colony search algorithm for optimal electrical distribution system strategical planning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1924–1931, Portland, Oregon, 2004, IEEE Press.

[267] R. Annaluru, S. Das, and A. Pahwa, Multi-level ant colony algorithm for optimal placement of capacitors in distribution systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1932–1937, Portland, Oregon, 2004, IEEE Press.

[268] A. Pirzada, A. Datta, and C. McDonald, Trusted routing in ad-hoc networks using pheromone trails, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1938–1943, Portland, Oregon, 2004, IEEE Press.

[269] C. Mumford, A hierarchical evolutionary approach to multi-objective optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1944–1951, Portland, Oregon, 2004, IEEE Press.

[270] J. Branke, H. Schmeck, K. Deb, and R. Maheshwar, Parallelizing multi-objective evolutionary algorithms: Cone separation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1952–1957, Portland, Oregon, 2004, IEEE Press.

[271] C. Grosan, Improving the performance of evolutionary algorithms for the multiobjective 0/1 knapsack problem using epsilon -dominance, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1958–1963, Portland, Oregon, 2004, IEEE Press.

[272] S. Marwaha, D. Srinivasan, C. K. Tham, and A. Vasilakos, Evolutionary fuzzy multi-objective routing for wireless mobile ad hoc networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1964–1971, Portland, Oregon, 2004, IEEE Press.

[273] K. Y. Chan, E. Aydin, and T. Fogarty, Parameterisation of mutation in evolutionary algorithms using the estimated main effect of genes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1972–1979, Portland, Oregon, 2004, IEEE Press.

[274] J. Vesterstroem and R. Thomsen, A comparative study of differential evolution, particle swarm optimization, and evolutionary algorithms on numerical benchmark problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1980–1987, Portland, Oregon, 2004, IEEE Press.

[275] F. Zhang and G. V. Dozier, A comparison of distributed restricted recombination operators for genetic and evolutionary societies of hill-climbers: A disacsp perspective, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1988–1995, Portland, Oregon, 2004, IEEE Press.

[276] T. Ray, N. Venkatarayalu, K. S. Won, and K. P. Chan, Study on the behaviour and implementation of parent centric crossover within the generalized generation gap model, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1996–2003, Portland, Oregon, 2004, IEEE Press.

[277] S. Paterlini and T. Krink, High performance clustering with differential evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2004–2011, Portland, Oregon, 2004, IEEE Press.

[278] X.-F. Xie, W.-J. Zhang, and D.-C. Bi, Handling equality constraints by adaptive relaxing rule for swarm algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2012–2016, Portland, Oregon, 2004, IEEE Press.

[279] X.-F. Xie, W.-J. Zhang, and D.-C. Bi, Optimizing semiconductor devices by self-organizing particle swarm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2017–2022, Portland, Oregon, 2004, IEEE Press.

[280] D. Tasoulis, N. Pavlidis, V. Plagianakos, and M. Vrahatis, Parallel differential evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2023–2029, Portland, Oregon, 2004, IEEE Press.

[281] P. Buzing, A. Eiben, M. Schut, and T. Toma, Cooperation and communication in evolving artificial societies, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2030–2037, Portland, Oregon, 2004, IEEE Press.

[282] G. Enee and C. Escazut, Evolution of communication in a genetic based multi-agent system: Use wise resources, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2038–2044, Portland, Oregon, 2004, IEEE Press.

[283] D. Ashlock and B. Powers, The effect of tag recognition on non-local adaptation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2045–2051, Portland, Oregon, 2004, IEEE Press.

[284] G. Kendall, R. Yaakob, and P. Hingston, An investigation of an evolutionary approach to the opening of go, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2052–2059, Portland, Oregon, 2004, IEEE Press.

[285] I. Ono, Y. Seike, R. Morishita, N. Ono, and M. Matsui, An evolutionary algorithm taking account of mutual interactions among substances for inference of genetic networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2060–2067, Portland, Oregon, 2004, IEEE Press.

[286] N. Noman, K. Okada, N. Hosoyama, and H. Iba, Use of clustering to improve the layout of gene network for visualization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2068–2075, Portland, Oregon, 2004, IEEE Press.

[287] T. Paul and H. Iba, Selection of the most useful subset of genes for gene expression-based classification, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2076–2083, Portland, Oregon, 2004, IEEE Press.

[288] P. Koduru, S. Das, S. Welch, and J. L. Roe, A multi-objective ga-simplex hybrid approach for gene regulatory network models, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2084–2091, Portland, Oregon, 2004, IEEE Press.

[289] A. Song and V. Ciesielski, Texture analysis by genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2092–2099, Portland, Oregon, 2004, IEEE Press.

[290] J.-S. Jang, K.-H. Han, and J.-H. Kim, Face detection using quantum-inspired evolutionary algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2100–2106, Portland, Oregon, 2004, IEEE Press.

[291] A. Treptow and A. Zell, Combining adaboost learning and evolutionary search to select features for real-time object detection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2107–2113, Portland, Oregon, 2004, IEEE Press.

[292] D. Miller, R. Arguello, and G. Greenwood, Evolving artificial neural network structures: Experimental results for biologically-inspired adaptive mutations, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2114–2119, Portland, Oregon, 2004, IEEE Press.

[293] H. Chen and D. guo Feng, An effective evolutionary strategy for bijective s-boxes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2120–2123, Portland, Oregon, 2004, IEEE Press.

[294] J. C. Hernandez and P. Isasi, New results on the genetic cryptanalysis of tea and reduced-round versions of xtea, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2124–2129, Portland, Oregon, 2004, IEEE Press.

[295] N. Nedjah and L. Mourelle, Secure evolutionary hardware for public-key cryptosystems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2130–2137, Portland, Oregon, 2004, IEEE Press.

[296] M. Seredynski and P. Bouvry, Block cipher based on reversible cellular automata, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2138–2143, Portland, Oregon, 2004, IEEE Press.

[297] S. Legg, M. Hutter, and A. Kumar, Tournament versus fitness uniform selection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2144–2151, Portland, Oregon, 2004, IEEE Press.

[298] B. Dorronsoro, E. Alba, M. Giacobini, and M. Tomassini, The influence of grid shape and asynchronicity on cellular evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2152–2158, Portland, Oregon, 2004, IEEE Press.

[299] O. Takahashi and S. Kobayashi, An angular distance dependent alternation model for real-coded genetic algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2159–2165, Portland, Oregon, 2004, IEEE Press.

[300] O. Dengiz, G. V. Dozier, and A. E. Smith, Non-deterministic decoding with memory to enhance precision in binary-coded genetic algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2166–2172, Portland, Oregon, 2004, IEEE Press.

[301] B. S., A. Alphones, and P. N. Suganthan, Concurrent pso and fdr-pso based reconfigurable phase-differentiated antenna array design, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2173–2179, Portland, Oregon, 2004, IEEE Press.

[302] P. E. Hotz, Asymmetric cell division in artificial evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2180–2186, Portland, Oregon, 2004, IEEE Press.

[303] S. Vigraham and J. Gallagher, On the relative efficacies of space saving *cgas for evolvable hardware applications, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2187–2193, Portland, Oregon, 2004, IEEE Press.

[304] M. H. Khan and M. A. Perkowski, Genetic algorithm based synthesis of multi-output ternary functions using quantum cascade of generalized ternary gates, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2194–2201, Portland, Oregon, 2004, IEEE Press.

[305] S. Kamio and H. Iba, Evolutionary construction of a simulator for real robots, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2202–2209, Portland, Oregon, 2004, IEEE Press.

[306] P. Lucidarme, An evolutionary algorithm for multi-robot unsupervised learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2210–2215, Portland, Oregon, 2004, IEEE Press.

[307] G. Parker, Partial recombination for the co-evolution of model parameters, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2216–2223, Portland, Oregon, 2004, IEEE Press.

[308] Y. Nojima, N. Kubota, and F. Kojima, Trajectory generation and accumulation for partner robots based on structured learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2224–2229, Portland, Oregon, 2004, IEEE Press.

[309] K. Tang, P. N. Suganthan, and X. Yao, Generalized lda using relevance weighting and evolution strategy, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2230–2234, Portland, Oregon, 2004, IEEE Press.

[310] S. Stanhope, Evolution strategies for multivariate-to-anything partially specified random vector generation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2235–2240, Portland, Oregon, 2004, IEEE Press.

[311] A. Tulai and F. Oppacher, Maintaining diversity and increasing the accuracy of classification rules through automatic speciation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2241–2249, Portland, Oregon, 2004, IEEE Press.

[312] M. Goldstein and G. Yen, An evolutionary algorithm method for sampling n-partite graphs, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2250–2257, Portland, Oregon, 2004, IEEE Press.

[313] P. Lichodzijewski, N. Zincir-Heywood, and M. Heywood, Cascaded gp models for data mining, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2258–2264, Portland, Oregon, 2004, IEEE Press.

[314] A. S. Uyar and H. T. Uyar, An event-driven test framework for evolutionary algorithms in dynamic environments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2265–2272, Portland, Oregon, 2004, IEEE Press.

[315] D. Ashlock and K. Bryden, Evolutionary control of lsystem interpretation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2273–2279, Portland, Oregon, 2004, IEEE Press.

[316] J. Zhang, H. Chung, and B. Hu, Adaptive probabilities of crossover and mutation in genetic algorithms based on clustering technique, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2280–2287, Portland, Oregon, 2004, IEEE Press.

[317] A. Czarn, C. MacNish, K. Vijayan, and B. Turlach, Statistical exploratory analysis of genetic algorithms: The importance of interaction, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2288–2295, Portland, Oregon, 2004, IEEE Press.

[318] M. Nakamura, N. Yamashiro, and Y. Gong, Iterative parallel and distributed genetic algorithms with biased initial population, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2296–2301, Portland, Oregon, 2004, IEEE Press.

[319] Y. Xu, S. Salcedo-Sanz, and X. Yao, Non-standard cost terminal assignment problems using tabu search approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2302–2306, Portland, Oregon, 2004, IEEE Press.

[320] W.-J. Zhang, X.-F. Xie, and D.-C. Bi, Handling boundary constraints for numrical optimization by particle swarm flying in periodic search space, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2307–2311, Portland, Oregon, 2004, IEEE Press.

[321] I. Tanev, T. Ray, and A. Buller, Evolutionary design, robustness and adaptation of sidewinding locomotion of simulated libmless wheelless robot, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2312–2319, Portland, Oregon, 2004, IEEE Press.

[322] Z. Fan, E. Goodman, W. Jiachuan, R. Ronald, S. Kisung, and H. Jianjun, Hierarchical evolutionary synthesis of mems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2320–2327, Portland, Oregon, 2004, IEEE Press.

[323] H. Yapicioglu, G. V. Dozier, and A. E. Smith, Bi-criteria model for locating a semi-desirable facility on a plane using particle swarm optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2328–2334, Portland, Oregon, 2004, IEEE Press.

[324] P. Zou, Z. Zhou, G. Chen, and X. Yao, A novel memetic algorithm with random multi-local-search: A case study of tsp, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2335–2340, Portland, Oregon, 2004, IEEE Press.

[325] E. De Jong, Towards a bounded pareto-coevolution archive, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2341–2348, Portland, Oregon, 2004, IEEE Press.

[326] M. Chang, K. Ohkura, K. Ueda, and M. Sugiyama, Modeling coevolutionary genetic algorithms on two-bit landscapes: Partnering strategies, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2349–2356, Portland, Oregon, 2004, IEEE Press.

[327] E. Hughes, Swarm guidance using a multi-objective co-evolutionary on-line evolutionary algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2357–2363, Portland, Oregon, 2004, IEEE Press.

[328] J. Brewster and R. G. Reynolds, Alternative fuel adoption, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2364–2371, Portland, Oregon, 2004, IEEE Press.