Список литературы

[1] Y. Zhou and Y. Tan, Particle swarm optimization with triggered mutation and its implementation based on gpu, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1–8, Portland, Oregon, USA, 2010, ACM.

[2] Z. Chen, Z. He, and C. Zhang, Particle swarm optimizer with self-adjusting neighborhoods, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 9–14, Portland, Oregon, USA, 2010, ACM.

[3] L. Vanneschi, D. Codecasa, and G. Mauri, An empirical comparison of parallel and distributed particle swarm optimization methods, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 15–22, Portland, Oregon, USA, 2010, ACM.

[4] Y. Lin, X. min Hu, and J. Zhang, An ant-colony-system-based activity scheduling method for the lifetime maximization of heterogeneous wireless sensor networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 23–30, Portland, Oregon, USA, 2010, ACM.

[5] W. jie Yu and J. Zhang, Pheromone-distribution-based adaptive ant colony system, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 31–38, Portland, Oregon, USA, 2010, ACM.

[6] Z.-H. Zhan and J. Zhang, Self-adaptive differential evolution based on pso learning strategy, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 39–46, Portland, Oregon, USA, 2010, ACM.

[7] N. Lemmens and K. Tuyls, Stigmergic landmark routing: a routing algorithm for wireless mobile ad-hoc networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 47–54, Portland, Oregon, USA, 2010, ACM.

[8] K. Deb and N. Padhye, Development of efficient particle swarm optimizers by using concepts from evolutionary algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 55–62, Portland, Oregon, USA, 2010, ACM.

[9] F. Neumann, D. Sudholt, and C. Witt, A few ants are enough: Aco with iteration-best update, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 63–70, Portland, Oregon, USA, 2010, ACM.

[10] M. Lopez-Ibanez and T. Stuetzle, The impact of design choices of multiobjective antcolony optimization algorithms on performance: an experimental study on the biobjective tsp, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 71–78, Portland, Oregon, USA, 2010, ACM.

[11] S. Salim, M. Javed, and A. H. Akbar, Honey-bee dancing-inspired architecture for fault tolerance in wireless sensor networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 79–80, Portland, Oregon, USA, 2010, ACM.

[12] A. W. Mohemmed, M. Zhang, and W. N. Browne, Particle swarm optimisation for outlier detection, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 83–84, Portland, Oregon, USA, 2010, ACM.

[13] J. B. Brown and M. Huber, Pseudo-hierarchical ant-based clustering using a heterogeneous agent hierarchy and automatic boundary formation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 85–86, Portland, Oregon, USA, 2010, ACM.

[14] F. Ducatelle, G. A. Di Caro, and L. M. Gambardella, Cooperative self-organization in a heterogeneous swarm robotic system, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 87–94, Portland, Oregon, USA, 2010, ACM.

[15] M. L. Pilat and C. Jacob, Evolution of vision capabilities in embodied virtual creatures, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 95–102, Portland, Oregon, USA, 2010, ACM.

[16] J. Lehman and K. O. Stanley, Revising the evolutionary computation abstraction: minimal criteria novelty search, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 103–110, Portland, Oregon, USA, 2010, ACM.

[17] J. C. Bongard and G. S. Hornby, Guarding against premature convergence while accelerating evolutionary search, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 111–118, Portland, Oregon, USA, 2010, ACM.

[18] S. Koos, J.-B. Mouret, and S. Doncieux, Crossing the reality gap in evolutionary robotics by promoting transferable controllers, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 119–126, Portland, Oregon, USA, 2010, ACM.

[19] M. Knudson and K. Tumer, Coevolution of heterogeneous multi-robot teams, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 127–134, Portland, Oregon, USA, 2010, ACM.

[20] H. J. Goldsby, D. B. Knoester, and C. Ofria, Evolution of division of labor in genetically homogenous groups, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 135–142, Portland, Oregon, USA, 2010, ACM.

[21] B. D. Connelly, B. E. Beckmann, and P. K. McKinley, Resource abundance promotes the evolution of public goods cooperation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 143–150, Portland, Oregon, USA, 2010, ACM.

[22] J. D. Hiller and H. Lipson, Morphological evolution of freeform robots, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 151–152, Portland, Oregon, USA, 2010, ACM.

[23] C. Fernando, Neuronal replicators solve the stability-plasticity dilemma, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 153–154, Portland, Oregon, USA, 2010, ACM.

[24] K.-C. Wong, K.-S. Leung, and M.-H. Wong, Protein structure prediction on a lattice model via multimodal optimization techniques, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 155–162, Portland, Oregon, USA, 2010, ACM.

[25] A. Farinaccio, L. Vanneschi, M. Giacobini, G. Mauri, and P. Provero, On the use of genetic programming for the prediction of survival in cancer, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 163–170, Portland, Oregon, USA, 2010, ACM.

[26] L.-Y. Lo, T.-M. Chan, K.-H. Lee, and K.-S. Leung, Challenges rising from learning motif evaluation functions using genetic programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 171–178, Portland, Oregon, USA, 2010, ACM.

[27] U. Kamath, K. A. De Jong, and A. Shehu, Selecting predictive features for recognition of hypersensitive sites of regulatory genomic sequences with an evolutionary algorithm, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 179–186, Portland, Oregon, USA, 2010, ACM.

[28] C. García-Martínez, C. Lima, J. Twycross, N. Krasnogor, and M. Lozano, P system model optimisation by means of evolutionary based search algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 187–194, Portland, Oregon, USA, 2010, ACM.

[29] R. J. Urbanowicz and J. H. Moore, The application of michigan-style learning classifiersystems to address genetic heterogeneity and epistasisin association studies, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 195–202, Portland, Oregon, USA, 2010, ACM.

[30] E. R. Holzinger *et al.*, Initialization parameter sweep in athena: optimizing neural networks for detecting gene-gene interactions in the presence of small main effects, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 203–210, Portland, Oregon, USA, 2010, ACM.

[31] E. Atilgan and J. Hu, Efficient protein-ligand docking using sustainable evolutionary algorithm, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 211–212, Portland, Oregon, USA, 2010, ACM.

[32] J. Kubalik, P. Buryan, and L. Wagner, Solving the dna fragment assembly problem efficiently using iterative optimization with evolved hypermutations, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 213–214, Portland, Oregon, USA, 2010, ACM.

[33] N. A. Sinnott-Armstrong, C. S. Greene, and J. H. Moore, Fast genome-wide epistasis analysis using ant colony optimization for multifactor dimensionality reduction analysis on graphics processing units, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 215–216, Portland, Oregon, USA, 2010, ACM.

[34] H. Jiang and Y. Chen, An efficient algorithm for generalized minimum spanning tree problem, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 217–224, Portland, Oregon, USA, 2010, ACM.

[35] S. Iordache, Consultant-guided search: a new metaheuristic for combinatorial optimization problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 225–232, Portland, Oregon, USA, 2010, ACM.

[36] S. X. Wu and W. Banzhaf, A hierarchical cooperative evolutionary algorithm, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 233–240, Portland, Oregon, USA, 2010, ACM.

[37] J. Bibai, P. Saveant, M. Schoenauer, and V. Vidal, On the generality of parameter tuning in evolutionary planning, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 241–248, Portland, Oregon, USA, 2010, ACM.

[38] T. Hildebrandt, J. Heger, and B. Scholz-Reiter, Towards improved dispatching rules for complex shop floor scenarios: a genetic programming approach, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 257–264, Portland, Oregon, USA, 2010, ACM.

[39] K. M. Leung and X. Zhang, Discrete versus continuous parametrization of bank credit rating systems optimization using differential evolution, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 265–272, Portland, Oregon, USA, 2010, ACM.

[40] F. Stonedahl and S. H. Stonedahl, Heuristics for sampling repetitions in noisy landscapes with fitness caching, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 273–280, Portland, Oregon, USA, 2010, ACM.

[41] Z. Ren and Z. Feng, An ant colony optimization approach to the multiple-choice multidimensional knapsack problem, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 281–288, Portland, Oregon, USA, 2010, ACM.

[42] E. Doğan, F. Erdal, and M. P. Saka, Optimum design of grillage systems under code provisions using particle swarm optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 289–290, Portland, Oregon, USA, 2010, ACM.

[43] J. J. Merelo, A. M. Mora, and T. P. Runarsson, Beating exhaustive search at its own game: revisiting evolutionary mastermind, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 291–292, Portland, Oregon, USA, 2010, ACM.

[44] C.-W. Tsai, S.-P. Tseng, M.-C. Chiang, and C.-S. Yang, A framework for accelerating metaheuristics via pattern reduction, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 293–294, Portland, Oregon, USA, 2010, ACM.

[45] S. O. Kimbrough, A. Kuo, and H. C. Lau, Effective heuristic methods for finding non-optimal solutions of interest in constrained optimization models, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 295–296, Portland, Oregon, USA, 2010, ACM.

[46] E. López-Camacho, H. Terashima-Marín, P. Ross, and M. Valenzuela-Rendón, Problem-state representations in a hyper-heuristic approach for the 2d irregular bpp, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 297–298, Portland, Oregon, USA, 2010, ACM.

[47] E. Montero, M.-C. Riff, and B. Neveu, An evaluation of off-line calibration techniques for evolutionary algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 299–300, Portland, Oregon, USA, 2010, ACM.

[48] W. Steitz and F. Rothlauf, Solving ocst problems with problem-specific guided local search, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 301–302, Portland, Oregon, USA, 2010, ACM.

[49] E. Radetic and M. Pelikan, Spurious dependencies and eda scalability, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 303–310, Portland, Oregon, USA, 2010, ACM.

[50] C.-Y. Chuang and W.-L. Hsu, Multivariate multi-model approach for globally multimodal problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 311–318, Portland, Oregon, USA, 2010, ACM.

[51] J. hui Zhong and J. Zhang, A robust estimation of distribution algorithm for power electronic circuits design, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 319–326, Portland, Oregon, USA, 2010, ACM.

[52] J. Yang, H. Xu, Y. Cai, and P. Jia, Effective structure learning for eda via l1-regularizedbayesian networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 327–334, Portland, Oregon, USA, 2010, ACM.

[53] H. N. Luong, H. T. Nguyen, and C. W. Ahn, Entropy-based substructural local search for the bayesian optimization algorithm, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 335–342, Portland, Oregon, USA, 2010, ACM.

[54] H. T. Nguyen, H. N. Luong, and C. W. Ahn, Entropy measurement-based estimation model for bayesian optimization algorithm, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 343–350, Portland, Oregon, USA, 2010, ACM.

[55] P. A. Bosman, The anticipated mean shift and cluster registration in mixture-based edas for multi-objective optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 351–358, Portland, Oregon, USA, 2010, ACM.

[56] R. Salinas-Gutiérrez, A. Hernández-Aguirre, and E. R. Villa-Diharce, D-vine eda: a new estimation of distribution algorithm based on regular vines, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 359–366, Portland, Oregon, USA, 2010, ACM.

[57] A. Nikanjam, H. Sharifi, B. H. Helmi, and A. Rahmani, A new dsm clustering algorithm for linkage groups identification, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 367–368, Portland, Oregon, USA, 2010, ACM.

[58] A. Melkozerov and H.-G. Beyer, On the analysis of self-adaptive evolution strategies on elliptic model: first results, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 369–376, Portland, Oregon, USA, 2010, ACM.

[59] A. M. Chwatal, G. R. Raidl, and M. Zöch, Fitting multi-planet transit models to photometric time-data series by evolution strategies, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 377–384, Portland, Oregon, USA, 2010, ACM.

[60] D. V. Arnold and N. Hansen, Active covariance matrix adaptation for the (1+1)-cma-es, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 385–392, Portland, Oregon, USA, 2010, ACM.

[61] T. Glasmachers, T. Schaul, S. Yi, D. Wierstra, and J. Schmidhuber, Exponential natural evolution strategies, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 393–400, Portland, Oregon, USA, 2010, ACM.

[62] M. Preuss, G. Rudolph, and S. Wessing, Tuning optimization algorithms for real-world problems by means of surrogate modeling, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 401–408, Portland, Oregon, USA, 2010, ACM.

[63] W. Gong, Álvaro Fialho, and Z. Cai, Adaptive strategy selection in differential evolution, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 409–416, Portland, Oregon, USA, 2010, ACM.

[64] H. Ma and D. Simon, Biogeography-based optimization with blended migration for constrained optimization problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 417–418, Portland, Oregon, USA, 2010, ACM.

[65] E. Gonzales, S. Mabu, K. Taboada, K. Hirasawa, and K. Shimada, Pruning association rules using statistics and genetic relation algoritm, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 419–420, Portland, Oregon, USA, 2010, ACM.

[66] O. M. Shir, J. Roslund, and H. Rabitz, Forced optimal covariance adaptive learning: modified cma-es for efficient hessian determination, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 421–422, Portland, Oregon, USA, 2010, ACM.

[67] R. Liu, W. Zhang, L. Jiao, F. Liu, and J. Ma, A sphere-dominance based preference immune-inspired algorithm for dynamic multi-objective optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 423–430, Portland, Oregon, USA, 2010, ACM.

[68] D. F. Lochtefeld and F. W. Ciarallo, Deterministic helper-objective sequences applied to job-shop scheduling, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 431–438, Portland, Oregon, USA, 2010, ACM.

[69] J. Schrum and R. Miikkulainen, Evolving agent behavior in multiobjective domains using fitness-based shaping, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 439–446, Portland, Oregon, USA, 2010, ACM.

[70] T. Ulrich, J. Bader, and E. Zitzler, Integrating decision space diversity into hypervolume-based multiobjective search, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 455–462, Portland, Oregon, USA, 2010, ACM.

[71] M. Li, J. Zheng, R. Shen, K. Li, and Q. Yuan, A grid-based fitness strategy for evolutionary many-objective optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 463–470, Portland, Oregon, USA, 2010, ACM.

[72] I. Loshchilov, M. Schoenauer, and M. Sebag, A mono surrogate for multiobjective optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 471–478, Portland, Oregon, USA, 2010, ACM.

[73] D. Sharma and P. Collet, An archived-based stochastic ranking evolutionary algorithm (asrea) for multi-objective optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 479–486, Portland, Oregon, USA, 2010, ACM.

[74] T. Voß, N. Hansen, and C. Igel, Improved step size adaptation for the mo-cma-es, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 487–494, Portland, Oregon, USA, 2010, ACM.

[75] R. Berghammer, T. Friedrich, and F. Neumann, Set-based multi-objective optimization, indicators, and deteriorative cycles, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 495–502, Portland, Oregon, USA, 2010, ACM.

[76] O. Kramer and H. Danielsiek, Dbscan-based multi-objective niching to approximate equivalent pareto-subsets, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 503–510, Portland, Oregon, USA, 2010, ACM.

[77] K. Bringmann and T. Friedrich, The maximum hypervolume set yields near-optimal approximation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 511–518, Portland, Oregon, USA, 2010, ACM.

[78] H. Ishibuchi, Y. Sakane, N. Tsukamoto, and Y. Nojima, Simultaneous use of different scalarizing functions in moea/d, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 519–526, Portland, Oregon, USA, 2010, ACM.

[79] F. Folino and C. Pizzuti, Multiobjective evolutionary community detection for dynamic networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 535–536, Portland, Oregon, USA, 2010, ACM.

[80] S. Zapotecas Martínez and C. A. Coello Coello, A multi-objective meta-model assisted memetic algorithm with non gradient-based local search, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 537–538, Portland, Oregon, USA, 2010, ACM.

[81] D. Dumitrescu, R. I. Lung, R. Nagy, D. Zaharie, and A. Bartha, Exploring evolutionary detected fuzzy equilibria: a link between normative theory and real life, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 539–540, Portland, Oregon, USA, 2010, ACM.

[82] A. K. Hutzschenreuter, P. A. Bosman, and H. La Poutré, Enhanced hospital resource management using anticipatory policies in online dynamic multi-objective optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 541–542, Portland, Oregon, USA, 2010, ACM.

[83] M. D. Schmidt and H. Lipson, Age-fitness pareto optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 543–544, Portland, Oregon, USA, 2010, ACM.

[84] L. Martí, J. García, A. Berlanga, and J. M. Molina, Moving away from error-based learning in multi-objective estimation of distribution algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 545–546, Portland, Oregon, USA, 2010, ACM.

[85] P. Verbancsics and K. O. Stanley, Transfer learning through indirect encoding, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 547–554, Portland, Oregon, USA, 2010, ACM.

[86] K. L. Downing, The baldwin effect in developing neural networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 555–562, Portland, Oregon, USA, 2010, ACM.

[87] S. Risi, J. Lehman, and K. O. Stanley, Evolving the placement and density of neurons in the hyperneat substrate, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 563–570, Portland, Oregon, USA, 2010, ACM.

[88] T. Steiner, Y. Jin, and B. Sendhoff, Evolving heterochrony for cellular differentiation using vector field embryogeny, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 571–578, Portland, Oregon, USA, 2010, ACM.

[89] S. Harding, J. F. Miller, and W. Banzhaf, Self modifying cartesian genetic programming: finding algorithms that calculate pi and e to arbitrary precision, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 579–586, Portland, Oregon, USA, 2010, ACM.

[90] J.-B. Mouret, S. Doncieux, and B. Girard, Importing the computational neuroscience toolbox into neuro-evolution-application to basal ganglia, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 587–594, Portland, Oregon, USA, 2010, ACM.

[91] M. A. Trefzer, T. Kuyucu, J. F. Miller, and A. M. Tyrrell, Image compression of natural images using artificial gene regulatory networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 595–602, Portland, Oregon, USA, 2010, ACM.

[92] D. B. Knoester, H. J. Goldsby, and P. K. McKinley, Neuroevolution of mobile ad hoc networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 603–610, Portland, Oregon, USA, 2010, ACM.

[93] H. Moriguchi and S. Honiden, Sustaining behavioral diversity in neat, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 611–618, Portland, Oregon, USA, 2010, ACM.

[94] J. Koutnik, F. Gomez, and J. Schmidhuber, Evolving neural networks in compressed weight space, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 619–626, Portland, Oregon, USA, 2010, ACM.

[95] J. E. Auerbach and J. C. Bongard, Evolving cppns to grow three-dimensional physical structures, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 627–634, Portland, Oregon, USA, 2010, ACM.

[96] J. Clune, B. E. Beckmann, P. K. McKinley, and C. Ofria, Investigating whether hyperneat produces modular neural networks, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 635–642, Portland, Oregon, USA, 2010, ACM.

[97] B. Inden, Y. Jin, R. Haschke, and H. Ritter, Neatfields: evolution of neural fields, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 645–646, Portland, Oregon, USA, 2010, ACM.

[98] T. Soule and R. B. Heckendorn, A developmental algorithm for multi-agent swarms with scalable hierarchies, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 647–648, Portland, Oregon, USA, 2010, ACM.

[99] R. Collier and M. Wineberg, Approaches to multidimensional scaling for adaptive landscape visualization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 649–656, Portland, Oregon, USA, 2010, ACM.

[100] J. Benjamin and B. A. Julstrom, Breaking ties with secondary fitness in a genetic algorithm for the bin packing problem, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 657–664, Portland, Oregon, USA, 2010, ACM.

[101] M. Pelikan, Nk landscapes, problem difficulty, and hybrid evolutionary algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 665–672, Portland, Oregon, USA, 2010, ACM.

[102] R. Yehoshua, M. Avigal, and R. Unger, Analysis of the effects of lifetime learning on population fitness using vose model, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 681–688, Portland, Oregon, USA, 2010, ACM.

[103] R. Tulshyan, R. Arora, K. Deb, and J. Dutta, Investigating ea solutions for approximate kkt conditions in smooth problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 689–696, Portland, Oregon, USA, 2010, ACM.

[104] T.-C. Lien, T.-L. Yu, and Y.-S. You, Co-evolution of cooperative strategies under egoism, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 697–704, Portland, Oregon, USA, 2010, ACM.

[105] T. Jansen and C. Zarges, Aging beyond restarts, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 705–712, Portland, Oregon, USA, 2010, ACM.

[106] M. W. Hauschild and M. Pelikan, Network crossover performance on nk landscapes and deceptive problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 713–720, Portland, Oregon, USA, 2010, ACM.

[107] F. Vafaee, G. Turán, and P. C. Nelson, Optimizing genetic operator rates using a markov chain model of genetic algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 721–728, Portland, Oregon, USA, 2010, ACM.

[108] Y. Wen, H. Xu, and J. Yang, A heuristic-based hybrid genetic algorithm for heterogeneous multiprocessor scheduling, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 729–736, Portland, Oregon, USA, 2010, ACM.

[109] P. Unachak and E. Goodman, Solving multiobjective flexible job-shop scheduling using an adaptive representation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 737–742, Portland, Oregon, USA, 2010, ACM.

[110] B. M. de Mendonca Neta, G. H. D. Araujo, F. G. Guimaraes, and R. C. Mesquita, A hybrid genetic algorithm for automatic graph drawing based on the topology-shape-metric approach, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 743–750, Portland, Oregon, USA, 2010, ACM.

[111] A. M. Barreto, H. S. Bernardino, and H. J. Barbosa, Probabilistic performance profiles for the experimental evaluation of stochastic algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 751–758, Portland, Oregon, USA, 2010, ACM.

[112] B. Doerr and D. Johannsen, Edge-based representation beats vertex-based representation in shortest path problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 759–766, Portland, Oregon, USA, 2010, ACM.

[113] Álvaro Fialho, M. Schoenauer, and M. Sebag, Toward comparison-based adaptive operator selection, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 767–774, Portland, Oregon, USA, 2010, ACM.

[114] S. F. Galan and O. J. Mengshoel, Generalized crowding for genetic algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 775–782, Portland, Oregon, USA, 2010, ACM.

[115] P. Avery and S. Louis, Coevolving influence maps for spatial team tactics in a rts game, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 783–790, Portland, Oregon, USA, 2010, ACM.

[116] B. P. Carlson and D. F. Hougen, Phenotype feedback genetic algorithm operators for heuristic encoding of snakes within hypercubes, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 791–798, Portland, Oregon, USA, 2010, ACM.

[117] J. Crofford, B. E. Eskridge, and D. F. Hougen, Applying the triple parameter hypothesis to maintenance scheduling, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 799–806, Portland, Oregon, USA, 2010, ACM.

[118] J. E. Cook and D. R. Tauritz, An exploration into dynamic population sizing, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 807–814, Portland, Oregon, USA, 2010, ACM.

[119] A. Ter-Sarkisov, S. R. Marsland, and B. R. Holland, The k-bit-swap: a new genetic algorithm operator, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 815–816, Portland, Oregon, USA, 2010, ACM.

[120] R. De Prisco, G. Zaccagnino, and R. Zaccagnino, Evobasscomposer: a multi-objective genetic algorithm for 4-voice compositions, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 817–818, Portland, Oregon, USA, 2010, ACM.

[121] F. Nadi, A. T. Khader, and M. A. Al-Betar, Adaptive genetic algorithm using harmony search, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 819–820, Portland, Oregon, USA, 2010, ACM.

[122] V. M. Kureichik, B. K. Lebedev, and O. B. Lebedev, Hybrid evolutionary algorithm of planning vlsi, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 821–822, Portland, Oregon, USA, 2010, ACM.

[123] M. A. Addicoat and Z. E. Brain, Using a meta-ga for parametric optimization of simple gas in the computational chemistry domain, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 823–824, Portland, Oregon, USA, 2010, ACM.

[124] H. M. Abbas, Mixed-coded evolutionary algorithm for gaussian mixture maximum likelihood clustering with model selection, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 825–826, Portland, Oregon, USA, 2010, ACM.

[125] A. I. Esparcia-Alcazár, A. Martínez-García, A. M. Mora, J. J. Merelo, and P. García-Sánchez, Genetic evolution of fuzzy finite state machines to control bots in a first-person shooter game, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 829–830, Portland, Oregon, USA, 2010, ACM.

[126] P. Ortegon-Cano, D. A. Hartasanchez, and C. R. Stephens, Why recombination should be adaptive, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 831–832, Portland, Oregon, USA, 2010, ACM.

[127] T. Meekhof and T. Soule, Noise pressure: systematic overestimation of population fitness in genetic algorithms with noisy fitness functions, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 833–834, Portland, Oregon, USA, 2010, ACM.

[128] J. A. Herrera-Ortiz, C. Oliver-Morales, and K. Rodríguez-Vázquez, Amount and type of information: a ga-hardness taxonomy, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 835–836, Portland, Oregon, USA, 2010, ACM.

[129] U. Bhowan, M. Zhang, and M. Johnston, Auc analysis of the pareto-front using multi-objective gp for classification with unbalanced data, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 845–852, Portland, Oregon, USA, 2010, ACM.

[130] P. Lichodzijewski and M. I. Heywood, Symbiosis, complexification and simplicity under gp, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 853–860, Portland, Oregon, USA, 2010, ACM.

[131] L. Trujillo, P. Legrand, and J. Lévy-Véhel, The estimation of hölderian regularity using genetic programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 861–868, Portland, Oregon, USA, 2010, ACM.

[132] N. Q. Uy, N. X. Hoai, M. O'Neill, and B. McKay, Semantics based crossover for boolean problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 869–876, Portland, Oregon, USA, 2010, ACM.

[133] C. Downey, M. Zhang, and W. N. Browne, New crossover operators in linear genetic programming for multiclass object classification, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 885–892, Portland, Oregon, USA, 2010, ACM.

[134] R. M. A. Azad and C. Ryan, Abstract functions and lifetime learning in genetic programming for symbolic regression, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 893–900, Portland, Oregon, USA, 2010, ACM.

[135] E. Galván-López, J. McDermott, M. O'Neill, and A. Brabazon, Towards an understanding of locality in genetic programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 901–908, Portland, Oregon, USA, 2010, ACM.

[136] A. Zafra and S. Ventura, Grammar guided genetic programming for multiple instance learning: an experimental study, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 909–916, Portland, Oregon, USA, 2010, ACM.

[137] C. L. Pennachin, M. Looks, and J. A. de Vasconcelos, Robust symbolic regression with affine arithmetic, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 917–924, Portland, Oregon, USA, 2010, ACM.

[138] D. A. Augusto, H. J. C. Barbosa, and N. F. F. Ebecken, Coevolutionary multi-population genetic programming for data classification, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 933–940, Portland, Oregon, USA, 2010, ACM.

[139] K. Vladislavleva, K. Veeramachaneni, M. Burland, J. Parcon, and U.-M. O'Reilly, Knowledge mining with genetic programming methods for variable selection in flavor design, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 941–948, Portland, Oregon, USA, 2010, ACM.

[140] B. Foster and A. Somayaji, Object-level recombination of commodity applications, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 957–964, Portland, Oregon, USA, 2010, ACM.

[141] E. Fast, C. Le Gouse, S. Forrest, and W. Weimer, Designing better fitness functions for automated program repair, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 965–972, Portland, Oregon, USA, 2010, ACM.

[142] H. G. Momm and G. Easson, Population restarting: a study case of feature extraction from remotely sensed imagery using textural information, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 973–974, Portland, Oregon, USA, 2010, ACM.

[143] D. F. Barrero, D. Camacho, and M. D. R-Moreno, Confidence intervals of success rates in evolutionary computation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 975–976, Portland, Oregon, USA, 2010, ACM.

[144] D. P. Ahalpara, Improved forecasting of time series data of real system using genetic programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 977–978, Portland, Oregon, USA, 2010, ACM.

[145] J. Wang and Y. Tan, A novel genetic programming based morphological image analysis algorithm, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 979–980, Portland, Oregon, USA, 2010, ACM.

[146] D. Curran, E. Freuder, and T. Jansen, Incremental evolution of local search heuristics, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 981–982, Portland, Oregon, USA, 2010, ACM.

[147] Z. Gajda and L. Sekanina, When does cartesian genetic programming minimize the phenotype size implicitly?, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 983–984, Portland, Oregon, USA, 2010, ACM.

[148] C. E. Borges, C. L. Alonso, and J. L. Montana, Model selection in genetic programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 985–986, Portland, Oregon, USA, 2010, ACM.

[149] M. McMullin and T. Soule, Constant versus variable arity operators in genetic programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 987–988, Portland, Oregon, USA, 2010, ACM.

[150] F. Alonso, L. Martínez, A. Santamaría, A. Pérez, and J. P. Valente, Gggp-based method for modeling time series: operator selection, parameter optimization and expert evaluation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 989–990, Portland, Oregon, USA, 2010, ACM.

[151] C. D. Toledo-Suárez, A first assessment of the use of extended relational alphabets in accuracy classifier systems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 991–998, Portland, Oregon, USA, 2010, ACM.

[152] E. P. Manning, Coevolution in a large search space using resource-limited nash memory, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 999–1006, Portland, Oregon, USA, 2010, ACM.

[153] U. Johansson, R. König, and L. Niklasson, Genetic rule extraction optimizing brier score, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1007–1014, Portland, Oregon, USA, 2010, ACM.

[154] C. Lode, U. Richter, and H. Schmeck, Adaption of xcs to multi-learner predator/prey scenarios, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1015–1022, Portland, Oregon, USA, 2010, ACM.

[155] A. Orriols-Puig, X. Llorà, and D. E. Goldberg, How xcs deals with rarities in domains with continuous attributes, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1023–1030, Portland, Oregon, USA, 2010, ACM.

[156] M. Snel and S. Whiteson, Multi-task evolutionary shaping without pre-specified representations, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1031–1038, Portland, Oregon, USA, 2010, ACM.

[157] M. A. Franco, N. Krasnogor, and J. Bacardit, Speeding up the evaluation of evolutionary learning systems using gpgpus, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1039–1046, Portland, Oregon, USA, 2010, ACM.

[158] M. Liśkiewicz and J. Textor, Negative selection algorithms without generating detectors, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1047–1054, Portland, Oregon, USA, 2010, ACM.

[159] N. Macià, A. Orriols-Puig, and E. Bernadó-Mansilla, In search of targeted-complexity problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1055–1062, Portland, Oregon, USA, 2010, ACM.

[160] C. Su, Y. Gao, and C. Cao, Learning classifier system using both labeled and unlabeled data, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1065–1066, Portland, Oregon, USA, 2010, ACM.

[161] M. Behdad, T. French, L. Barone, and M. Bennamoun, On the problems of using learning classifier systems for fraud detection, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1067–1068, Portland, Oregon, USA, 2010, ACM.

[162] A. S. Meiguins, A. A. Freitas, R. C. Limao, S. F. Junior, and B. S. Meiguins, An estimation of distribution algorithm for the automatic generation of clustering algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1069–1070, Portland, Oregon, USA, 2010, ACM.

[163] P. Buryan and J. Kubalik, Context-sensitive refinements for stochasticoptimization algorithms in inductive logic programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1071–1072, Portland, Oregon, USA, 2010, ACM.

[164] P. Rajagopalan, A. Rawal, and R. Miikkulainen, Emergence of competitive and cooperative behavior using coevolution, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1073–1074, Portland, Oregon, USA, 2010, ACM.

[165] M. Walton, G. Grewal, and G. Darlington, Parallel fpga-based implementation of scatter search, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1075–1082, Portland, Oregon, USA, 2010, ACM.

[166] G. Luque and E. Alba, Selection pressure and takeover time of distributed evolutionary algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1083–1088, Portland, Oregon, USA, 2010, ACM.

[167] D. Vrajitoru, Shared memory genetic algorithms in a multi-agent context, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1097–1104, Portland, Oregon, USA, 2010, ACM.

[168] J. Lässig and D. Sudholt, The benefit of migration in parallel evolutionary algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1105–1112, Portland, Oregon, USA, 2010, ACM.

[169] K. Shimada and K. Hirasawa, A method of association rule analysis for incomplete database using genetic network programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1115–1122, Portland, Oregon, USA, 2010, ACM.

[170] M. Salichon and K. Tumer, A neuro-evolutionary approach to micro aerial vehicle control, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1123–1130, Portland, Oregon, USA, 2010, ACM.

[171] J. F. S. II and K. Tumer, Robust neuro-control for a micro quadrotor, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1131–1138, Portland, Oregon, USA, 2010, ACM.

[172] G. Wilson and W. Banzhaf, Interday foreign exchange trading using linear genetic programming, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1139–1146, Portland, Oregon, USA, 2010, ACM.

[173] C. Myburgh and K. Deb, Evolutionary algorithms in large-scale open pit mine scheduling, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1155–1162, Portland, Oregon, USA, 2010, ACM.

[174] A. Garrett, Z. Chen, and D. E. Smith, Constructing numerically stable real number codes using evolutionary computation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1163–1170, Portland, Oregon, USA, 2010, ACM.

[175] J. Jaros and V. Dvorak, Evolutionary-based conflict-free scheduling of collective communications on spidergon nocs, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1171–1178, Portland, Oregon, USA, 2010, ACM.

[176] K. Kim, R. B. McKay, and B.-R. Moon, Multiobjective evolutionary algorithms for dynamic social network clustering, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1179–1186, Portland, Oregon, USA, 2010, ACM.

[177] E. Reehuis and T. Bäck, Mixed-integer evolution strategy using multiobjective selection applied to warehouse design optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1187–1194, Portland, Oregon, USA, 2010, ACM.

[178] M. A. Al-Betar, A. T. Khader, and F. Nadi, Selection mechanisms in memory consideration for examination timetabling with harmony search, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1203–1210, Portland, Oregon, USA, 2010, ACM.

[179] S.-K. Lee and B.-R. Moon, A new modular genetic programming for finding attractive technical patterns in stock markets, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1219–1226, Portland, Oregon, USA, 2010, ACM.

[180] J. M. Colmenar *et al.*, Improving reliability of embedded systems through dynamic memory manager optimization using grammatical evolution, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1227–1234, Portland, Oregon, USA, 2010, ACM.

[181] M. Ovreiu and D. Simon, Biogeography-based optimization of neuro-fuzzy system parameters for diagnosis of cardiac disease, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1235–1242, Portland, Oregon, USA, 2010, ACM.

[182] G. Stracquadanio, C. Drago, V. Romano, and G. Nicosia, Multi-objective optimization of doping profile in semiconductor design, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1243–1250, Portland, Oregon, USA, 2010, ACM.

[183] G. K. Pedersen and M. V. Butz, Evolving robust controller parameters using covariance matrix adaptation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1251–1258, Portland, Oregon, USA, 2010, ACM.

[184] N. Padhye and K. Deb, Evolutionary multi-objective optimization and decision making for selective laser sintering, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1259–1266, Portland, Oregon, USA, 2010, ACM.

[185] M. Ceriani, F. Ferrandi, P. L. Lanzi, D. Sciuto, and A. Tumeo, Multiprocessor systems-on-chip synthesis using multi-objective evolutionary computation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1267–1274, Portland, Oregon, USA, 2010, ACM.

[186] M. Tanji and H. Iba, Conbreo: a music performance rendering system using hybrid approach of iec and automated evolution, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1275–1282, Portland, Oregon, USA, 2010, ACM.

[187] K. Veeramachaneni, K. Vladislavleva, M. Burland, J. Parcon, and U.-M. O'Reilly, Evolutionary optimization of flavors, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1291–1298, Portland, Oregon, USA, 2010, ACM.

[188] E. Mayfield and C. Penstein-Rosé, Using feature construction to avoid large feature spaces in text classification, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1299–1306, Portland, Oregon, USA, 2010, ACM.

[189] A. Sierra and V. Ponsoda, Shorter, more reliable and valid tests by means of a genetic algorithm, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1307–1308, Portland, Oregon, USA, 2010, ACM.

[190] Y.-S. Choi, B.-K. Koo, and B.-R. Moon, Optimization of an image set by genetic feature selection for real-time photomosaics, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1309–1310, Portland, Oregon, USA, 2010, ACM.

[191] T. Sugawara, K. Fukuda, T. Hirotsu, and S. Kurihara, Adaptive probabilistic task allocation in large-scale multi-agent systems and its evaluation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1311–1312, Portland, Oregon, USA, 2010, ACM.

[192] R. de A. Araújo, A. L. de Oliveira, and S. C. Soares, A covariance matrix adaptation based evolutionary methodology for phase adjustment in financial time series forecasting, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1315–1316, Portland, Oregon, USA, 2010, ACM.

[193] D. Mosnier, F. Gillot, A. Ducloux, and M. Ichchou, Integrated pre-design step methodology based onmulti-objective evolutionary optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1317–1318, Portland, Oregon, USA, 2010, ACM.

[194] Y.-S. You, T.-L. Yu, and T.-C. Lien, Psychological preference-based optimization framework on the nurse scheduling problem, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1319–1320, Portland, Oregon, USA, 2010, ACM.

[195] M. Sato, Y. Sato, and M. Namiki, Proposal of a multi-core processor architecture for effective evolutionary computation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1321–1322, Portland, Oregon, USA, 2010, ACM.

[196] C. C. Tutum and J. H. Hattel, Multi-objective optimization of process parameters in friction stir welding, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1323–1324, Portland, Oregon, USA, 2010, ACM.

[197] S. Roychoudhury *et al.*, Mitigation strategies in epidemics: evolutionary optimization using a hierarchy of objective functions, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1325–1326, Portland, Oregon, USA, 2010, ACM.

[198] R. Evins, P. Pointer, and R. Vaidyanathan, Configuration of a genetic algorithm for multi-objective optimisation of solar gain to buildings, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1327–1328, Portland, Oregon, USA, 2010, ACM.

[199] S. Di Carlo *et al.*, Towards drift correction in chemical sensors using an evolutionary strategy, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1329–1330, Portland, Oregon, USA, 2010, ACM.

[200] M. J. Afridi, S. Manzoor, U. Rasheed, M. Ahmed, and K. Faraz, Performance evaluation of evolutionary algorithms for road detection, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1331–1332, Portland, Oregon, USA, 2010, ACM.

[201] A. C. Jensen and B. H. Cheng, On the use of genetic programming for automated refactoring and the introduction of design patterns, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1341–1348, Portland, Oregon, USA, 2010, ACM.

[202] A. Windisch, Search-based test data generation from stateflow statecharts, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1349–1356, Portland, Oregon, USA, 2010, ACM.

[203] Y. Zhang, E. Alba, J. J. Durillo, S. Eldh, and M. Harman, Today/future importance analysis, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1357–1364, Portland, Oregon, USA, 2010, ACM.

[204] Z. Xu, M. B. Cohen, and G. Rothermel, Factors affecting the use of genetic algorithms in test suite augmentation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1365–1372, Portland, Oregon, USA, 2010, ACM.

[205] A. P. Conrad, R. S. Roos, and G. M. Kapfhammer, Empirically studying the role of selection operators duringsearch-based test suite prioritization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1373–1380, Portland, Oregon, USA, 2010, ACM.

[206] M. Hall, P. McMinn, and N. Walkinshaw, Superstate identification for state machines using search-based clustering, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1381–1388, Portland, Oregon, USA, 2010, ACM.

[207] T. Kremmel, J. Kubalik, and S. Biffl, Multiobjective evolutionary algorithm for software project portfolio optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1389–1390, Portland, Oregon, USA, 2010, ACM.

[208] J. L. Wilkerson and D. Tauritz, Coevolutionary automated software correction, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1391–1392, Portland, Oregon, USA, 2010, ACM.

[209] T. Kötzing, P. K. Lehre, F. Neumann, and P. S. Oliveto, Ant colony optimization and the minimum cut problem, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1393–1400, Portland, Oregon, USA, 2010, ACM.

[210] Y. Akimoto, Y. Nagata, I. Ono, and S. Kobayashi, Theoretical analysis of evolutionary computation on continuously differentiable functions, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1401–1408, Portland, Oregon, USA, 2010, ACM.

[211] L. D. Whitley, F. Chicano, E. Alba, and F. Luna, Elementary landscapes of frequency assignment problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1409–1416, Portland, Oregon, USA, 2010, ACM.

[212] S. Sanyal, R. S, and S. Biswas, Necessary and sufficient conditions for success of the metropolis algorithm for optimization, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1417–1424, Portland, Oregon, USA, 2010, ACM.

[213] F. Chicano, G. Luque, and E. Alba, Elementary landscape decomposition of the quadratic assignment problem, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1425–1432, Portland, Oregon, USA, 2010, ACM.

[214] D. Johannsen, P. P. Kurur, and J. Lengler, Can quantum search accelerate evolutionary algorithms?, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1433–1440, Portland, Oregon, USA, 2010, ACM.

[215] P. K. Lehre and C. Witt, Black-box search by unbiased variation, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1441–1448, Portland, Oregon, USA, 2010, ACM.

[216] C. Horoba and D. Sudholt, Ant colony optimization for stochastic shortest path problems, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1465–1472, Portland, Oregon, USA, 2010, ACM.

[217] L. Manzoni, L. Vanneschi, and G. Mauri, Definition of a crossover based distance for genetic algorithms, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1473–1474, Portland, Oregon, USA, 2010, ACM.

[218] A. Valsecchi, L. Vanneschi, and G. Mauri, Optimization speed and fair sets of functions, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1475–1476, Portland, Oregon, USA, 2010, ACM.

[219] P. S. de Mattos Neto, A. R. Lima Junior, and T. A. Ferreira, Time series forecasting using a perturbative intelligent system, in *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*, edited by J. Branke *et al.*, pp. 1477–1478, Portland, Oregon, USA, 2010, ACM.