Список литературы

[1] A. Banerjee and I. Abu-Mahfouz, "Evolutionary algorithm-based parameter identification for nonlinear dynamical systems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1–5.

[2] A. Raich and K. Fritz, "Benefits of implicit redundant representation genetic algorithms for conceptual design and damage identification," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 6–13.

[3] M. Mirmomeni and W. Punch, "Co-evolving data driven models and test data sets with the application to forecast chaotic time series," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 14–20.

[4] M. Yagoubi, L. Thobois, and M. Schoenauer, "Asynchronous evolutionary multi-objective algorithms with heterogenous evaluation costs," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 21–28.

[5] A. Lemonge, M. Silva, and H. Barbosa, "Design optimization of geometrically nonlinear truss structures considering cardinality constraints," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 29–36.

[6] X. Li, B. Li, S. Mabu, and K. Hirasawa, "A novel estimation of distribution algorithm using graph-based chromosome representation and reinforcement learning," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 37–44.

[7] S.-H. Chen and M.-C. Chen, "Bi-variate artificial chromosomes with genetic algorithm for single machine scheduling problems with sequence-dependent setup times," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 45–53.

[8] C. Pitangui and G. Zaverucha, "Inductive logic programming through estimation of distribution algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 54–61.

[9] A. R. Goncalves and F. J. Von Zuben, "Online learning in estimation of distribution algorithms for dynamic environments," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 62–69.

[10] P. Rohlfshagen and S. Lucas, "Ms pac-man versus ghost team cec 2011 competition," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 70–77.

[11] L. Junqing, P. Quanke, and X. Shengxian, "Flexible job shop scheduling problems by a hybrid artificial bee colony algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 78–83.

[12] C. Ozturk and D. Karaboga, "Hybrid artificial bee colony algorithm for neural network training," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 84–88.

[13] B. Akay and D. Karaboga, "Wavelet packets optimization using artificial bee colony algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 89–94.

[14] T. Ozcan and S. Esnaf, "A heuristic approach based on artificial bee colony algorithm for retail shelf space optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 95–101.

[15] S. Aldridge, B. Babb, F. Moore, and M. Peterson, "Improved reconstruction of deep space images via genetic algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 102–109.

[16] H. Yapicioglu and A. E. Smith, "Disservice representation using the gini coefficient in semi-desirable facility location problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 110–114.

[17] C. Andres, L. Llana, and M. Nunez, "Self-adaptive fuzzy-timed systems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 115–122.

[18] H. Espitia and J. Sofrony, "Path planning of mobile robots using potential fields and swarms of brownian particles," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 123–129.

[19] D. wei Gong, C. liang Qi, Y. Zhang, and M. Li, "Modified particle swarm optimization for odor source localization of multi-robot," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 130–136.

[20] H. Hiruma, A. Fukunaga, K. Komiya, and H. Iba, "Evolving an effective robot tour guide," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 137–144.

[21] A. Jennings and R. Ordonez, "Population based optimization for variable operating points," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 145–151.

[22] I.-B. Jeong, C.-S. Park, K.-I. Na, S. Han, and J.-H. Kim, "Particle swarm optimization-based central patter generator for robotic fish locomotion," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 152–157.

[23] G. Cuccu, F. Gomez, and T. Glasmachers, "Novelty-based restarts for evolution strategies," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 158–163.

[24] N. Fukushima, Y. Nagata, S. Kobayashi, and I. Ono, "Proposal of distance-weighted exponential natural evolution strategies," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 164–171.

[25] E. Parkinson, A. Ghandar, Z. Michalewicz, and A. Tuson, "Estimating the reproductive potential of offspring in evolutionary heuristics for combinatorial optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 172–178.

[26] T. Uchitane and T. Hatanaka, "Applying evolution strategies to biped locomotion learning in robocup 3d soccer simulation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 179–185.

[27] A. Krause, "Performance of evolving trading strategies with different discount factors," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 186–191.

[28] D. Lohpetch and D. Corne, "Multiobjective algorithms for financial trading multiobjective out-trades single-objective," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 192–199.

[29] J. Palotti, T. Salles, G. L. Pappa, M. A. Goncalves, and W. Meira, Jr., "Assessing documents' credibility with genetic programming," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 200–207.

[30] O. Qadir, J. Liu, G. Tempesti, J. Timmis, and A. Tyrrell, "Hardware architecture for a bidirectional hetero-associative protein processing associative memory," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 208–215.

[31] E. Heinrich, R. Joost, and R. Salomon, "Learning from the barn owl auditory system: A bio-inspired localization hardware architecture," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 216–221.

[32] G. Papa and T. Garbolino, "Optimal on-line built-in self-test structure for system-reliability improvement," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 222–229.

[33] A. G. Zamorano, J. Timmis, and A. Tyrrell, "A flexible decentralised communication architecture on a field programmable gate array for swarm system simulations," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 230–237.

[34] D. Atkins, K. Neshatian, and M. Zhang, "A domain independent genetic programming approach to automatic feature extraction for image classification," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 238–245.

[35] S. Mahdi, Z. Mengjie, and J. Mark, "Edge detection using constrained discrete particle swarm optimisation in noisy images," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 246–253.

[36] W. Fu, M. Johnston, and M. Zhang, "Genetic programming for edge detection: A global approach," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 254–261.

[37] M. Wong, X. He, and W. chang Yeh, "Image clustering using particle swarm optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 262–268.

[38] Z. Vasicek and M. Bidlo, "Evolutionary design of robust noise-specific image filters," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 269–276.

[39] U. Kamath, K. De Jong, and A. Shehu, "An evolutionary-based approach for feature generation: Eukaryotic promoter recognition," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 277–284.

[40] M. Becker, "Design of fault tolerant networks with agent-based simulation of physarum polycephalum," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 285–291.

[41] A. Ghaffarizadeh, K. Ahmadi, and N. S. Flann, "Sorting unsigned permutations by reversals using multi-objective evolutionary algorithms with variable size individuals," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 292–295.

[42] Y. Sato, N. Hasegawa, and M. Sato, "Gpu acceleration for sudoku solution with genetic operations," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 296–303.

[43] M. Garcia-Arenas, J. J. Merelo, A. M. Mora, P. Castillo, and G. Romero, "Assessing speed-ups in commodity cloud storage services for distributed evolutionary algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 304–311.

[44] M. Munetomo, "Realizing robust and scalable evolutionary algorithms toward exascale era," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 312–317.

[45] A. Munawar, M. Wahib, M. Munetomo, and K. Akama, "Advanced genetic algorithm to solve minlp problems over gpu," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 318–325.

[46] S. Okdem, D. Karaboga, and C. Ozturk, "An application of wireless sensor network routing based on artificial bee colony algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 326–330.

[47] B. A. Garro, H. Sossa, and R. A. Vazquez, "Artificial neural network synthesis by means of artificial bee colony (abc) algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 331–338.

[48] A. Oner, S. Ozcan, and D. Dengi, "Optimization of university course scheduling problem with a hybrid artificial bee colony algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 339–346.

[49] M. F. Tasgetiren, O. Bulut, and M. M. Fadiloglu, "A discrete artificial bee colony algorithm for the economic lot scheduling problem," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 347–353.

[50] A. F. M. Ayob, T. Ray, and W. Smith, "Scenario-based hydrodynamic design optimization of high speed planing craft for coastal surveillance," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 354–361.

[51] D. Wilcox, A. McNabb, and K. Seppi, "Solving virtual machine packing with a reordering grouping genetic algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 362–369.

[52] N. P. Tizzo, J. M. A. Coello, and E. Cardozo, "Automatic composition of semantic web services using a-teams with genetic agents," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 370–377.

[53] L. Poladian, "A genotype-to-phenotype mapping for microstructured polymer optical fibres," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 378–385.

[54] R. Veroneze, F. de Franca, and F. J. Von Zuben, "Assessing the performance of a swarm-based biclustering technique for data imputation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 386–393.

[55] D. Zhang, S. Mabu, F. Wen, and K. Hirasawa, "A sequential subspace face recognition framework using genetic-based clustering," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 394–400.

[56] D. Dohare and V. S. Devi, "Combination of similarity measures for time series classification using genetic algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 401–408.

[57] E. Y. Ahn, T. Mullen, and J. Yen, "Evolutionary based feature extraction with dynamic mutation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 409–416.

[58] J. Gallagher and M. Oppenheimer, "An improved evolvable oscillator for all flight mode control of an insect-scale flapping-wing micro air vehicle," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 417–425.

[59] M. Kijowski, J. Gallagher, and L. Merkle, "Improved learning in an evolvable hardware hover controller for an insect scale flapping-wing micro air vehicle," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 426–431.

[60] R. Li, R. Etemaadi, M. Emmerich, and M. Chaudron, "An evolutionary multiobjective optimization approach to component-based software architecture design," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 432–439.

[61] P. Bremner, M. Samie, A. Pipe, and A. Tyrrell, "Multi-objective optimisation of cell-array circuit evolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 440–446.

[62] S. Kimura and K. Matsumura, "Constrained multimodal function optimization using a simple evolutionary algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 447–454.

[63] F. Dobslaw, "Iteration-wise parameter learning," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 455–462.

[64] G. Greenwood, "On the value of operator-induced neighborhoods in fitness landscapes," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 463–467.

[65] J. Doucette and M. Heywood, "Revisiting the acrobot 'height' task: An example of efficient evolutionary policy search under an episodic goal seeking task," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 468–475.

[66] F. Mokom and Z. Kobti, "Evolution of artifact capabilities," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 476–483.

[67] L. G. De la Fraga and G. M. L. Dominguez, "Robust detection of several circles or ellipses with heuristics," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 484–490.

[68] H. T. Nguyen and B. Bhanu, "Tracking pedestrians with bacterial foraging optimization swarms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 491–495.

[69] Q. Shi and A. Song, "Selective motion detection by genetic programming," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 496–503.

[70] J. Geng and J. Liu, "Image texture classification using a multiagent genetic clustering algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 504–508.

[71] M. Daneshyari and G. Yen, "Dynamic optimization using cultural based pso," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 509–516.

[72] L. Coelho, D. Bernert, and V. Mariani, "A chaotic firefly algorithm applied to reliability-redundancy optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 517–521.

[73] V. Mariani, L. G. Luvizotto, C. Klein, and L. Coelho, "A normative differential evolution approach for estimation of heat transfer coefficient during freezing treatment by inverse analysis," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 522–528.

[74] J. de Armas, G. Miranda, and C. Leon, "Two encoding schemes for a multi-objective cutting stock problem," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 529–536.

[75] O. V. Neto, M. A. Pacheco, A. Pimentel, and E. Silveira, "A parallel evolutionary algorithm to search for global minima geometries of heterogeneous ab initio atomic clusters," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 537–543.

[76] O. V. Neto, I. Bezerra, M. A. Pacheco, and A. Pimentel, "Evolutionary optimization of sets of basis functions for first-row atoms by using discretization process," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 544–549.

[77] R. Green, II, L. Wang, M. Alam, and R. Formato, "Central force optimization on a gpu: A case study in high performance metaheuristics using multiple topologies," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 550–557.

[78] J. Liping and W. Yuping, "Genetic algorithm based on primal and dual theory for solving multiobjective bilevel linear programming," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 558–565.

[79] I. Rosberg, E. Goldbarg, and M. Goldbarg, "Solving the light up with ant colony optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 566–573.

[80] D. Rivero, E. Fernandez-Blanco, J. Dorado, and A. Pazos, "A new signal classification technique by means of genetic algorithms and knn," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 574–579.

[81] ——, "Using recurrent anns for the detection of epileptic seizures in eeg signals," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 580–585.

[82] P. Asconavieta, M. Goldbarg, and E. Goldbarg, "Evolutionary algorithm for the car renter salesman," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 586–593.

[83] L. Menezes and A. Coelho, "On ensembles of biclusters generated by nichepso," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 594–600.

[84] M. Hijaze and D. Corne, "Distributed evolutionary algorithm topologies with adaptive migration schemes," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 601–608.

[85] M. Lotif and A. Coelho, "Visually inspecting the search behavior of harmony search and its variants with viz3d," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 609–616.

[86] L. Cardamone, A. Mocci, and C. Ghezzi, "Dynamic synthesis of program invariants using genetic programming," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 617–624.

[87] F. de Franca and F. J. Von Zuben, "Extracting additive and multiplicative coherent biclusters with swarm intelligence," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 625–631.

[88] A. Gonzalez-Pardo and D. Camacho, "Analysis of grammatical evolution approaches to regular expression induction," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 632–639.

[89] J. Estevez, P. Toledo, and S. Alayon, "Using an induced relational decision tree for rule injection in a learning classifier system," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 640–647.

[90] M. Khan, A. Ayob, A. Isaacs, and T. Ray, "A novel evolutionary approach for 2d shape matching based on b-spline modeling," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 648–654.

[91] N. Hamada, Y. Nagata, S. Kobayashi, and I. Ono, "On scalability of adaptive weighted aggregation for multiobjective function optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 655–664.

[92] R. A. Vazquez, "Training spiking neural models using cuckoo search algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 665–672.

[93] M. Oiso, Y. Matsumura, T. Yasuda, and K. Ohkura, "Accelerating steady-state genetic algorithms based on cuda architecture," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 673–678.

[94] E. M. Dos Santos and R. Sabourin, "Classifier ensembles optimization guided by population oracle," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 679–684.

[95] B. Lee, H.-S. Seok, and B.-T. Zhang, "Evolving a population code for multimodal concept learning," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 685–692.

[96] M. Carpentieri, "On robustness of permutations sequencing operators: Solving satisfiability of random 3-cnfs by simple crossover," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 693–700.

[97] H. Lugo-Cordero, A. Fuentes-Rivera, R. Guha, and E. Ortiz-Rivera, "Particle swarm optimization for load balancing in green smart homes," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 701–706.

[98] O. Hassanein, S. Anavatti, and T. Ray, "Genetic fuzzy controller for robot manipulator position control based upon inverse dynamics," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 707–714.

[99] Z. Wang, R. Yang, L. Wang, R. Green, II, and A. Dounis, "A fuzzy adaptive comfort temperature model with grey predictor for multi-agent control system of smart building," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 715–722.

[100] E. Y. Ahn, T. Mullen, and J. Yen, "A two-population evolutionary algorithm for feature extraction: Combining filter and wrapper," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 723–730.

[101] C. K. Goh, D. Lim, L. Ma, Y. S. Ong, and P. Dutta, "A surrogate-assisted memetic co-evolutionary algorithm for expensive constrained optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 731–736.

[102] U. Halder, S. Das, D. Maity, A. Abraham, and D. Preetam, "Self adaptive cluster based and weed inspired differential evolution algorithm for real world optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 737–743.

[103] G. Pradipta, Z. Hamim, S. Das, and A. Abraham, "Hierarchical dynamic neighborhood based particle swarm optimization for global optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 744–751.

[104] M. Nasir, A. Mondal, S. Sengupta, S. Das, and A. Abraham, "An improved multiobjective evolutionary algorithm based on decomposition with fuzzy dominance," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 752–759.

[105] D. Silva, L. Pacifico, and T. Ludermir, "An evolutionary extreme learning machine based on group search optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 760–766.

[106] A. Haidar, K. Noman, R. Al-Jawfi, and H. A. Aziz, "An intelligent placement of distributed capacitance based on loss minimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed. New Orleans, USA: IEEE Computational Intelligence Society, 5-8 June 2011, pp. 767–771.

[107] B. Ross, "Evolution of stochastic bio-networks using summed rank strategies," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 772–779.

[108] D. Ashlock, E. Shiller, and C. Lee, "Comparison of evolved epidemic networks with diffusion characters," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 780–787.

[109] G. Vansant, P. Pezzoli, J. Monforte, and G. Fogel, "High-throughput toxicological classification of candidate drug compounds using gene expression, evolved neural networks, and a cell-based platform," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 788–794.

[110] P. Kromer, J. Platos, and V. Snasel, "Differential evolution for the linear ordering problem implemented on cuda," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 795–801.

[111] M. Wahib, A. Munawar, M. Munetomo, and K. Akama, "Optimization of parallel genetic algorithms for nvidia gpus," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 802–810.

[112] S. Tsutsui and N. Fujimoto, "Fast qap solving by aco with 2-opt local search on a gpu," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 811–818.

[113] Y. Gong and A. Fukunaga, "Distributed island-model genetic algorithms using heterogeneous parameter settings," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 819–826.

[114] D. Ashlock and S. Nguyen, "Financial control of the evolution of autonomous npcs," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 827–834.

[115] E. Piccolo and G. Squillero, "Adaptive opponent modelling for the iterated prisoner's dilemma," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 835–840.

[116] E. Vazquez, C. A. Coello Coello, and F. Sagols, "An evolutionary algorithm for tuning a chess evaluation function," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 841–847.

[117] D. Ashlock and C. McGuinness, "Decomposing the level generation problem with tiles," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 848–855.

[118] S. Elsayed, R. Sarker, and D. Essam, "Ga with a new multi-parent crossover for constrained optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 856–863.

[119] N. Hamza, S. Elsayed, R. Sarker, and D. Essam, "Differential evolution combined with constraint consensus for constrained optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 864–871.

[120] L. Perez and M.-C. Riff, "New bounds for the relaxed traveling tournament problems using an artificial immune algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 872–878.

[121] O. Clancey and M. Witten, "A memetic algorithm for dosimetric optimization in cyberknife robotic radiosurgical treatment planning," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 879–884.

[122] M. U, C. Ho, S. Funk, and K. Rasheed, "Gart: A genetic algorithm based real time system scheduler," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 885–892.

[123] A. Reynolds, A. Abdollahzadeh, D. Corne, M. Christie, B. Davies, and G. Williams, "A parallel boa-pso hybrid algorithm for history matching," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 893–900.

[124] C. C. Tutum and Z. Fan, "Multi-criteria layout synthesis of mems devices using memetic computing," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 901–907.

[125] T. Menezes, "Evolutionary modeling of a blog network," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 908–915.

[126] P. Wang, K. Tang, E. Tsang, and X. Yao, "A memetic genetic programming with decision tree-based local search for classification problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 916–923.

[127] Z. C. Junior and G. L. Pappa, "A pso algorithm for improving multi-view classification," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 924–931.

[128] R. Carvalho, G. Brunoro, and G. L. Pappa, "Hcga: A genetic algorithm for hierarchical classification," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 932–939.

[129] A. Friedlander, K. Neshatian, and M. Zhang, "Meta-learning and feature ranking using genetic programming for classification: Variable terminal weighting," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 940–947.

[130] L. Malago', M. Matteucci, and G. Pistone, "Stochastic natural gradient descent by estimation of empirical covariances," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 948–955.

[131] L. Marti, J. Garcia, A. Berlanga, and J. M. Molina, "Indicator-based moneda: A comparative study of scalability with respect to decision space dimensions," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 956–963.

[132] L. Leal, M. Lemos, R. Holanda, R. Rabelo, and F. Borges, "A hybrid approach based on genetic fuzzy systems for wireless sensor networks," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 964–971.

[133] B. Li, X. Li, S. Mabu, and K. Hirasawa, "Variable size genetic network programming with binomial distribution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 972–979.

[134] Y. Wu, J. McCall, and D. Corne, "Fitness landscape analysis of bayesian network structure learning," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 980–987.

[135] H. Muehleisen, T. Walther, and R. Tolksdorf, "Multi-level indexing in a distributed self-organized storage system," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 988–993.

[136] G. Peterson, C. Mayer, and K. Cousin, "Wolf ant," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 994–1001.

[137] M. K. Islam, M. Chetty, and M. Murshed, "Novel local improvement techniques in clustered memetic algorithm for protein structure prediction," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1002–1010.

[138] A. R. Chowdhury and M. Chetty, "An improved method to infer gene regulatory network using s-system," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1011–1018.

[139] S. Corns, "On the effects of graph based evolutionary algorithms for training finite state classifiers," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1019–1025.

[140] A. LaTorre, S. Muelas, and J.-M. Pena, "Benchmarking a hybrid de-rhc algorithm on real world problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1026–1032.

[141] S. Elsayed, R. Sarker, and D. Essam, "Ga with a new multi-parent crossover for solving ieee-cec2011 competition problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1033–1039.

[142] ——, "Differential evolution with multiple strategies for solving cec2011 real-world numerical optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1040–1047.

[143] A. Saha and T. Ray, "How does the good old genetic algorithm fare at real world optimization?" in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1048–1055.

[144] M. Asafuddoula, T. Ray, and R. Sarker, "An adaptive differential evolution algorithm and its performance on real world optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1056–1061.

[145] D. Ashlock, C. Kuusela, and M. Cojocaru, "Shopkeeper strategies in the iterated prisoner's dilemma," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1062–1069.

[146] G. Parker and P. Fritzsche, "Fitness biasing for evolving an xpilot combat agent," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1070–1075.

[147] A. Dziuk and R. Miikkulainen, "Creating intelligent agents through shaping of coevolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1076–1082.

[148] P. Avery, J. Togelius, A. Elvis, and R. P. van Leeuwen, "Computational intelligence and tower defence games," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1083–1090.

[149] F. Liang, O. Yew-Soon, T. Ah-Hwee, and C. Xian-Shun, "Towards human-like social multi-agents with memetic automaton," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1091–1098.

[150] V. Carina, N. Geoff, and W. van Heerden, "Evolution of a fictional dialogue," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1099–1106.

[151] D. Ashlock and J. Brown, "Fitness functions for searching the mandelbrot set," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1107–1114.

[152] J. A. Brown, D. Ashlock, S. Houghten, and J. Orth, "Autogeneration of fractal photographic mosaic images," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1115–1122.

[153] C. M. Fernandes, C. Isidoro, F. Barata, A. C. Rosa, and J. J. Merelo, "From pherographia to color pherographia - color sketching with artificial ants," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1123–1130.

[154] M. Nairat, P. Dahlstedt, and M. Nordahl, "Character evolution approach to generative storytelling," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1131–1136.

[155] E. Segredo, C. Segura, and C. Leon, "A multiobjectivised memetic algorithm for the frequency assignment problem," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1137–1144.

[156] C. Coia and B. Ross, "Automatic evolution of conceptual building architectures," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1145–1152.

[157] L. Thillainathan and D. Srinivasan, "Lrga for solving profit based generation scheduling problem in competitive environment," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1153–1159.

[158] P. Hingston and M. Preuss, "Red teaming with coevolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1160–1168.

[159] D. F. Barrero, M. R-Moreno, B. Castano, and D. Camacho, "An empirical study on the accuracy of computational effort in genetic programming," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1169–1176.

[160] J. Aleshunas and C. Janikow, "Cost-benefit analysis of using heuristics in acgp," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1177–1183.

[161] T. H. Nguyen, X. H. Nguyen, and R. I. McKay, "A study on genetic programming with layered learning and incremental sampling," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1184–1190.

[162] C. Downey and M. Zhang, "Execution trace caching for linear genetic programming," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1191–1198.

[163] C. Toledo, R. Oliveira, and P. Franca, "A hybrid heuristic approach to solve the multi level capacitated lot sizing problem," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1199–1206.

[164] M. Pilat and R. Neruda, "Asm-moma: Multiobjective memetic algorithm with aggregate surrogate model," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1207–1213.

[165] S. D. Handoko, C. K. Kwoh, Y. S. Ong, and J. Chan, "Classification-assisted memetic algorithms for solving optimization problems with restricted equality constraint function mapping," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1214–1221.

[166] A. Cruz, R. Cardoso, E. Wanner, and R. Takahashi, "Using convex quadratic approximation as a local search operator in evolutionary multiobjective algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1222–1229.

[167] M. Ali, A. Salhieh, R. A. Snaineh, and R. Reynolds, "Boosting cultural algorithms with an incongruous layered social fabric influence function," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1230–1237.

[168] R. Reynolds and D. Liu, "Multi-objective cultural algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1238–1246.

[169] G. Coelho, F. de Franca, and F. J. Von Zuben, "A concentration-based artificial immune network for combinatorial optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1247–1254.

[170] P. Castro and F. J. Von Zuben, "Training multilayer perceptrons with a gaussian artificial immune system," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1255–1262.

[171] K. Antonakopoulos and G. Tufte, "A common genetic representation capable of developing distinct computational architectures," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1263–1270.

[172] T. Steiner and B. Sendhoff, "Evolvability of graph- and vector field embryogeny representations," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1271–1278.

[173] B. Eskridge, "Extrapolation of regularity using indirect encodings," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1279–1286.

[174] H. H. Tsang and C. Jacob, "Rnadpcompare: An algorithm for comparing rna secondary structures based on image processing techniques," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1287–1294.

[175] D. Marco, D. Cairns, and C. Shankland, "Optimisation of process algebra models using evolutionary computation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1295–1300.

[176] A. Y. Salekdeh and K. C. Wiese, "Improving splice-junctions classification employing a novel encoding schema and decision-tree," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1301–1306.

[177] L. Amaral and E. Hruschka, "Transgenic, an operator for evolutionary algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1307–1313.

[178] Y. Wang, B. Li, and K. Zhang, "Estimation of distribution and differential evolution cooperation for real-world numerical optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1314–1320.

[179] H. K. Singh and T. Ray, "Performance of a hybrid ea-de-memetic algorithm on cec 2011 real world optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1321–1325.

[180] P. Korosec and J. Silc, "The continuous differential ant-stigmergy algorithm applied to real-world optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1326–1333.

[181] S. Bandaru, R. Tulshyan, and K. Deb, "Modified sbx and adaptive mutation for real world single objective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1334–1341.

[182] T. Schaul, Y. Sun, D. Wierstra, F. Gomez, and J. Schmidhuber, "Curiosity-driven optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1342–1348.

[183] C. Cobos, M. Mendoza, and E. Leon, "A hyper-heuristic approach to design and tuning heuristic methods for web document clustering," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1349–1357.

[184] R. Falcon, M. Almeida, and A. Nayak, "Fault identification with binary adaptive fireflies in parallel and distributed systems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1358–1365.

[185] M. Chica, O. Cordon, and S. Damas, "Tackling the 1/3 variant of the time and space assembly line balancing problem by means of a multiobjective genetic algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1366–1373.

[186] T. Abegaz, G. Dozier, K. Bryant, J. Adams, J. Shelton, R. Karl, and D. Woodard, "Ssga and eda based feature selection and weighting for face recognition," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1374–1380.

[187] B. C. Costa, P. E. M. Almeida, and E. Caldeira, "Traffic lights timing inside microregion simulator using multiobjective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1381–1386.

[188] S. Menzel, "Evolvable free-form deformation control volumes for evolutionary design optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1387–1394.

[189] R. Moritz, T. Ulrich, L. Thiele, and S. Buerklen, "Mutation operator characterization: Exhaustiveness, locality, and bias," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1395–1402.

[190] S. Hill and C. O'Riordan, "Examining the use of a non-trivial fixed genotype-phenotype mapping in genetic algorithms to induce phenotypic variability over deceptive uncertain landscapes," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1403–1410.

[191] A. Dymond, A. P. Engelbrecht, and S. Heyns, "The sensitivity of single objective optimization algorithm control parameter values under different computational constraints," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1411–1418.

[192] C. Ioannides, K. Eder, and G. Barrett, "Improving xcs performance on overlapping binary problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1419–1426.

[193] R. J. Preen and L. Bull, "Arithmetic dynamical genetic programming in the xcsf learning classifier system," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1427–1434.

[194] C. Sonstrod, U. Johansson, and R. Konig, "Evolving accurate and comprehensible classification rules," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1435–1442.

[195] U. Johansson, C. Sonstrod, and T. Lofstrom, "One tree to explain them all," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1443–1450.

[196] J.-W. Yoon and S.-B. Cho, "An efficient genetic algorithm with fuzzy c-means clustering for traveling salesman problem," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1451–1455.

[197] R. M. Azuma, G. Coelho, and F. J. Von Zuben, "Evolutionary multi-objective optimization for the vendor-managed inventory routing problem," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1456–1463.

[198] H. Ishibuchi, N. Akedo, H. Ohyanagi, and Y. Nojima, "Behavior of emo algorithms on many-objective optimization problems with correlated objectives," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1464–1471.

[199] T.-C. Chiang and Y.-P. Lai, "Moea/d-ams: Improving moea/d by an adaptive mating selection mechanism," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1472–1479.

[200] G. Adam and M. Zbigniew, "Using cellular evolution for diversification of the balance between accurate and interpretable fuzzy knowledge bases for classification," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1480–1487.

[201] S. Chuan, Y. Zhenyu, P. Xin, C. Yanan, and W. Bin, "Multi-objective decisionmaking in the detection of comprehensive community structures," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1488–1494.

[202] M. Ergezer and D. Simon, "Oppositional biogeography-based optimization for combinatorial problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1495–1502.

[203] L. Graham, J. Borbone, and G. Parker, "Comparison of a greedy selection operator to tournament selection and a hill climber," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1503–1507.

[204] G. Parker and W. Tarimo, "The effects of using a greedy factor in hexapod gait learning," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1508–1513.

[205] H. Handa, "Dimensionality reduction of scene and enemy information in mario," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1514–1519.

[206] M. Allen and P. Fritzsche, "Reinforcement learning with adaptive kanerva coding for xpilot game ai," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1520–1527.

[207] G. Parker, W. Tarimo, and M. Cantor, "Quadruped gait learning using cyclic genetic algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1528–1533.

[208] D. Hancock and G. Lamont, "Multi agent system for network attack classification using flow-based intrusion detection," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1534–1541.

[209] R. Alshammari and A. N. Zincir-Heywood, "Is machine learning losing the battle to produce transportable signatures against voip traffic?" in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1542–1549.

[210] G. Reynoso-Meza, J. Sanchis, X. Blasco, and J. M. Herrero, "Hybrid de algorithm with adaptive crossover operator for solving real-world numerical optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1550–1555.

[211] R. Mallipeddi and N. S. Ponnuthurai, "Ensemble differential evolution algorithm for cec2011 problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1556–1563.

[212] M. Ankush, A. K. Das, P. Mukherjee, S. Das, and P. N. Suganthan, "Modified differential evolution with local search algorithm for real world optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1564–1571.

[213] C. Echegoyen, Q. Zhang, A. Mendiburu, R. Santana, and J. A. Lozano, "On the limits of effectiveness in estimation of distribution algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1572–1579.

[214] L. Malago', M. Matteucci, and G. Valentini, "Introducing l1-regularized logistic regression in markov networks based edas," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1580–1587.

[215] J. J. Valdes, C. Cheung, and W. Wang, "Evolutionary computation methods for helicopter loads estimation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1588–1595.

[216] L. Zhou, A. Zhou, G. Zhang, and C. Shi, "An estimation of distribution algorithm based on nonparametric density estimation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1596–1603.

[217] A. Lopez-Jaimes, A. Arias-Montano, and C. A. Coello Coello, "Preference incorporation to solve many-objective airfoil design problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1604–1611.

[218] P. Walsh and P. Gade, "The use of an aesthetic measure for the evolution of fractal landscapes," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1612–1618.

[219] M. Awad and K. De Jong, "Optimization of spectral signature selection using multi-objective genetic algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1619–1626.

[220] S. Tomforde, A. Brameshuber, J. Haehner, and C. Mueller-Schloer, "Restricted on-line learning in real-world systems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1627–1634.

[221] J. Wei and M. Zhang, "A memetic particle swarm optimization for constrained multi-objective optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1635–1642.

[222] W. Chu, X. Gao, and S. Sorooshian, "Fortify particle swam optimizer (pso) with principal components analysis–an example in improving bound-handling for optimizing high-dimensional and complex problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1643–1647.

[223] C. Seren, "A hybrid jumping particle swarm optimization method for high dimensional unconstrained discrete problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1648–1655.

[224] C. Monson, "Simple adaptive cognition for pso," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1656–1663.

[225] J.-W. Hwang, Y.-S. Lee, and S.-B. Cho, "Structure evolution of dynamic bayesian network for traffic accident detection," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1664–1670.

[226] M. Abramson, I. Will, and R. Mittu, "Hybrid tuning of an evolutionary algorithm for sensor allocation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1671–1677.

[227] W.-C. Chiang, G. Cai, X. Xu, G. Mudunuri, and W. Zhu, "Two-stage tabu - particle swarm algorithms for the facility layout problem with size constraints," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1678–1685.

[228] A. LaTorre, S. Muelas, J.-M. Pena, R. Santana, and A. Merchan-Perez, "A differential evolution algorithm for the detection of synaptic vesicles," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1686–1693.

[229] J. Lepagnot, A. Nakib, H. Oulhadj, and P. Siarry, "Brain cine mri segmentation based on a multiagent algorithm for dynamic continuous optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1694–1701.

[230] M. Abello, L. T. Bui, and Z. Michalewicz, "An adaptive approach for solving dynamic scheduling with time-varying number of tasks - part i," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1702–1709.

[231] G. Rudolph, "On geometrically fast convergence to optimal dominated hypervolume of set-based multiobjective evolutionary algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1718–1722.

[232] Z. He and G. Yen, "An ensemble method for performance metrics in multiobjective evolutionary algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1723–1728.

[233] P. Shelokar, Q. Arnaud, and C. Oscar, "Subgraph mining in graph-based data using multiobjective evolutionary programming," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1729–1736.

[234] L. T. X. Yen, D. Sharma, D. Srinivasan, and P. N. Manji, "A modified hybrid particle swarm optimization approach for unit commitment," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1737–1744.

[235] H. Zhang, "Assessment of an evolutionary particle swarm optimizer with inertia weight," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1745–1752.

[236] ——, "An analysis of multiple particle swarm optimizers with inertia weight with diversive curiosity," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1753–1760.

[237] A. Tjiong and S. Monteiro, "Feature selection with pso and kernel methods for hyperspectral classification," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1761–1768.

[238] C.-L. Huo, T.-Y. Lai, and T.-Y. Sun, "The preliminary study on multi-swarm sharing particle swarm optimization: Applied to uav path planning problem," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1769–1775.

[239] J. Li, C. Zheng, and X. Hu, "A hypervolume based approach for minimal visual coverage shortest path," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1776–1783.

[240] M.-N. Hsieh, T.-C. Chiang, and L.-C. Fu, "A hybrid constraint handling mechanism with differential evolution for constrained multiobjective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1784–1791.

[241] Y. Shirasaki, S. Shimomura, M. Sugimoto, Y. Uwate, and Y. Nishio, "Effectiveness of guidepost pheromone for honeybee colony optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1792–1797.

[242] Z. Ye and H. Mohamadian, "Strengthen accuracy of feature recognition via integration of ant colony detection and adaptive contour tracking," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1798–1803.

[243] C. nien Lin, C.-L. Huo, S.-Y. Lin, Y.-H. Yu, and T.-Y. Sun, "Taguchi-based disturbance with tournament selection to improve on mopso," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1804–1809.

[244] T. Tsujimoto, T. Shindo, and K. Jin'no, "The neighborhood of canonical deterministic pso," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1810–1816.

[245] Y.-H. Huang and C.-K. Ting, "Genetic algorithm with path relinking for the multi-vehicle selective pickup and delivery problem," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1817–1824.

[246] M. Khairy, M. B. Fayek, and E. E. Hemayed, "Pso2: Particle swarm optimization with pso-based local search," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1825–1831.

[247] S.-T. Hsieh, S.-Y. Chiu, and S.-J. Yen, "Sharing mutation genetic algorithm for solving multi-objective optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1832–1838.

[248] N. Morshed and M. Chetty, "Reconstructing genetic networks with concurrent representation of instantaneous and time-delayed interactions," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1839–1846.

[249] M. Mousavi, S. Hoque, S. Rahnamayan, I. Dincer, and G. F. Naterer, "Optimal design of an air-cooling system for a li-ion battery pack in an electric vehicle with a genetic algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1847–1854.

[250] E. Benkhelifa, A. Tiwari, A. G. De Rueda, and M. Moniri, "Evolutionary multi-objective design optimisation of energy harvesting mems: The case of a piezoelectric," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1855–1862.

[251] J. Zhang, S. Chen, D. Levy, and Y. Lu, "Feedback loop mechanisms based particle swarm optimization with neighborhood topology," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1863–1870.

[252] E. Mojica-Nava and N. Quijano, "A replicator dynamics weighted control technique for a dc-dc converter," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1871–1877.

[253] E. C. Shi, F. H. Leung, and J. C. Lai, "An adaptive differential evolution with unsymmetrical mutation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1878–1885.

[254] P.-L. Chen, M.-C. Yang, and T.-Y. Sun, "Pso-based on-line tuning pid controller for setpoint changes and load disturbance," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1886–1893.

[255] P. Parracho, R. Neves, and N. Horta, "Trading with optimized uptrend pattern template using a genetic algorithm kernel," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1894–1900.

[256] R. I. Lung and D. Dumitrescu, "A new evolutionary approach to minimax problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1901–1904.

[257] H. lin Liu and F. Gu, "A improved nsga-ii algorithm based on sub-regional search," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1905–1910.

[258] A. F. Neto, A. Canuto, E. Goldbarg, and M. Goldbarg, "Optimization techniques for the selection of members and attributes in ensemble systems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1911–1918.

[259] P. Oliveira and M. Interciso, "Ternary representation improves the search for binary, one-dimensional density classifier cellular automata," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1919–1925.

[260] L. Scola, O. Neto, R. Takahashi, and S. Cerqueira, "Multi-objective optimal multiple reservoir operation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1926–1932.

[261] G. Leguizamon and C. A. Coello Coello, "A multi-region differential evolution algorithm for continuos optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1933–1939.

[262] S. Ghosh, S. Roy, D. Swagatam, A. Ajith, and I. Minhazul, "Peak-to-average power ratio reduction in ofdm systems using an adaptive differential evolution algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1940–1948.

[263] M. Islam, S. Ghosh, S. Das, A. Abraham, and S. Roy, "A modified discrete differential evolution based tdma scheduling scheme for many to one communications in wireless sensor networks," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1949–1956.

[264] V. M. Landassuri-Moreno and J. A. Bullinaria, "Biasing the evolution of modular neural networks," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1957–1964.

[265] T. Polushina and G. Sofronov, "Change-point detection in biological sequences via genetic algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1965–1970.

[266] R. Mallipeddi, G. Iacca, N. S. Ponnuthurai, F. Neri, and E. Mininno, "Ensemble strategies in compact differential evolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1971–1976.

[267] J. Hernandez and G. Toscano-Pulido, "A comparison on the search of particle swarm optimization and differential evolution on multi-objective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1977–1984.

[268] X. Lu, K. Tang, and X. Yao, "Classification-assisted differential evolution for computationally expensive problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1985–1992.

[269] P. S. Prampero and R. Attux, "Magnetic particle swarm optimization with estimation of distribution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 1993–2000.

[270] A. Shaban-Nejad and V. Haarslev, "An abstract representation model for evolutionary analysis of multi-agent interactions," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2001–2008.

[271] G. Greenwood and S. Chopra, "A numerical analysis of the evolutionary iterated snowdrift game," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2009–2015.

[272] A. Fernandez-Ares, A. M. Mora, J. J. Merelo, P. Garcia-Sanchez, and C. Fernandes, "Optimizing player behavior in a real-time strategy game using evolutionary algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2016–2023.

[273] K. O. Ellefsen, "Dynamic robot scheduling using a genetic algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2024–2031.

[274] C. Azevedo and A. Araujo, "Generalized immigration schemes for dynamic evolutionary multiobjective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2032–2039.

[275] M. Helbig and A. P. Engelbrecht, "Archive management for dynamic multi-objective optimisation problems using vector evaluated particle swarm optimisation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2040–2047.

[276] D. Coulter and E. Ehlers, "Biologically inspired obsolescence management in mobile agent systems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2048–2055.

[277] A. Alford, C. Hansen, G. Dozier, K. Bryant, J. Kelly, T. Abegaz, K. Ricanek, and D. Woodard, "Gec-based multi-biometric fusion," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2056–2059.

[278] D. Dias, A. Singulani, M. A. Pacheco, P. Souza, M. Pires, and O. V. Neto, "Self-assembly quantum dots growth prediction by quantum-inspired linear genetic programming," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2060–2067.

[279] T. A. L. Roedland, "Classifying glyphs by combining evolution and learning," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2068–2075.

[280] J. J. Yu, A. Y. Lam, and V. O. Li, "Evolutionary artificial neural network based on chemical reaction optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2076–2083.

[281] K. Uemura, S. ichi Kinoshita, Y. Nagata, S. Kobayashi, and I. Ono, "A new framework taking account of multi-funnel functions for real-coded genetic algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2084–2091.

[282] W. Herbawi and M. Weber, "Comparison of multiobjective evolutionary algorithms for solving the multiobjective route planning in dynamic multi-hop ridesharing," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2092–2099.

[283] M. Davarynejad, J. Rezaei, J. Vrancken, J. van den Berg, and C. A. Coello Coello, "Accelerating convergence towards the optimal pareto front," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2100–2107.

[284] M. Garza-Fabre, G. Toscano-Pulido, C. A. Coello Coello, and E. Rodriguez-Tello, "Effective ranking + speciation = many-objective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2108–2115.

[285] A. Saha, T. Ray, and W. Smith, "Towards practical evolutionary robust multi-objective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2116–2123.

[286] K. McClymont and E. Keedwell, "Benchmark multi-objective optimisation test problems with mixed encodings," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2124–2131.

[287] A. Lockett and R. Miikkulainen, "Measure-theoretic evolutionary annealing," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2132–2139.

[288] M. Emmerich, A. Deutz, and J. W. Klinkenberg, "Hypervolume-based expected improvement: Monotonicity properties and exact computation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2140–2147.

[289] A. Diaz-Manriquez, G. Toscano-Pulido, and W. Gomez-Flores, "On the selection of surrogate models in evolutionary optimization algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2148–2155.

[290] J. Spangenberg, C. C. Tutum, J. H. Hattel, N. Roussel, and M. R. Geiker, "Optimization of casting process parameters for homogeneous aggregate distribution in self-compacting concrete: A feasibility study," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2156–2162.

[291] A. Trivedi, N. M.Pindoriya, D. Srinivasan, and D. Sharma, "Improved multi-objective evolutionary algorithm for day-ahead thermal generation scheduling," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2163–2170.

[292] S. Madeiro, E. Galvao, C. Cavellucci, C. Lyra, and F. J. Von Zuben, "Simultaneous capacitor placement and reconfiguration for loss reduction in distribution networks by a hybrid genetic algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2171–2178.

[293] H. Liu and A. Qiu, "Space active noise control system design with multi-objective genetic algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2179–2185.

[294] B. Amiri, L. Hossain, and J. W. Crawford, "An efficient multiobjective evolutionary algorithm for community detection in social networks," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2186–2192.

[295] C. Chira and A. Gog, "Fitness evaluation for overlapping community detection in complex networks," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2193–2199.

[296] J. Naruchitparames, M. Gunes, and S. Louis, "Friend recommendations in social networks using genetic algorithms and network topology," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2200–2207.

[297] T. Takahama and S. Sakai, "Efficient nonlinear optimization by differential evolution with a rotation-invariant local sampling operation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2208–2215.

[298] U. Chakraborty, S. Das, and T. Abbott, "Clustering in mobile ad hoc networks with differential evolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2216–2221.

[299] N. Noman, D. Bollegala, and H. Iba, "An adaptive differential evolution algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2222–2229.

[300] S. Adra, M. Kiran, P. McMinn, and N. Walkinshaw, "A multiobjective optimisation approach for the dynamic inference and refinement of agent-based model specifications," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2230–2237.

[301] A. S. Shirazi, S. von Mammen, and C. Jacob, "Hierarchical self-organized learning in agent-based modeling of the mapk signaling pathway," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2238–2244.

[302] B. Al-Khateeb and G. Kendall, "The importance of look-ahead depth in evolutionary checkers," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2245–2251.

[303] L. Wang, S. Mabu, and K. Hirasawa, "Genetic network programming with updating rule accumulation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2252–2259.

[304] N. Goulart, L. Dias, S. Souza, and T. Noronha, "Biased random-key genetic algorithm for fiber installation in optical network optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2260–2264.

[305] M. Rocha, T. Sa, P. Sousa, P. Cortez, and M. Rio, "Multiobjective evolutionary algorithms for intradomain routing optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2265–2272.

[306] J. hui Zhong and J. Zhang, "Energy-efficient local wake-up scheduling in wireless sensor networks," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2273–2277.

[307] A. Schroeder, C. Wrzodek, J. Wollnik, A. Draeger, D. Wanke, K. W. Berendzen, and A. Zell, "Inferring transcriptional regulators for sets of co-expressed genes by multi-objective evolutionary optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2278–2285.

[308] C. Miller, F. Moore, B. Babb, and M. Peterson, "Improved reconstruction of quantized ct scans via genetic algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2286–2292.

[309] C. Chira, "A hybrid evolutionary approach to protein structure prediction with lattice models," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2293–2299.

[310] M. Garza-Fabre, E. Rodriguez-Tello, and G. Toscano-Pulido, "Comparing alternative energy functions for the hp model of protein structure prediction," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2300–2307.

[311] S. Kessentini, D. Barchiesi, T. Grosges, and M. L. de la Chapelle, "Particle swarm optimization and evolutionary methods for plasmonic biomedical applications," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2308–2313.

[312] R. Pasti, R. D. Maia, F. J. Von Zuben, and L. N. de Castro, "Heuristics to avoid redundant solutions on population-based multimodal continuous optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2314–2321.

[313] L. T. Bui, H. Abbass, S. Baker, M. Barlow, and A. Bender, "A grid-based heuristic for two-dimensional packing problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2322–2329.

[314] J. Grobler, A. P. Engelbrecht, G. Kendall, and V. Yadavalli, "Investigating the impact of alternative evolutionary selection strategies on multi-method global optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2330–2337.

[315] A. Alimadad, V. Dabbaghian, S. Singh, and H. H. Tsang, "Modeling hiv spread through sexual contact using a cellular automaton," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2338–2343.

[316] J. Legriel, S. Cotton, and O. Maler, "On universal search strategies for multi-criteria optimization using weighted sums," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2344–2351.

[317] L. Batista, F. Campelo, F. Guimaraes, and J. Ramirez, "A comparison of dominance criteria in many-objective optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2352–2359.

[318] S. Z. Martinez, A. Arias-Montano, and C. A. Coello Coello, "A nonlinear simplex search approach for multi-objective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2360–2367.

[319] N. Hamada, Y. Nagata, S. Kobayashi, and I. Ono, "Adaptive weighted aggregation 2: More scalable awa for multiobjective function optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2368–2375.

[320] F. Zeng, D. James, M. Y. H. Low, W. Cai, and P. Hingston, "Studies of pareto-based multi-objective competitive coevolutionary dynamics," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2376–2383.

[321] D. Rothman, S. Luke, and K. Sullivan, "Do multiple trials help univariate methods?" in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2384–2391.

[322] D. Ly and H. Lipson, "Trainer selection strategies for coevolving rank predictors," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2392–2399.

[323] M. Ibrahimov, A. Mohais, S. Schellenberg, and Z. Michalewicz, "Comparison of different evolutionary algorithms for global supply chain optimisation and parameter analysis," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2400–2407.

[324] Y. Wen and H. Xu, "A cooperative coevolution-based pittsburgh learning classifier system embedded with memetic feature selection," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2408–2415.

[325] L. Dumas, M. E. Rhabi, and G. Rochefort, "An evolutionary approach for blind deconvolution of barcode images with nonuniform illumination," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2416–2421.

[326] M. Salmani-Jelodar, S. Steiger, A. Paul, and G. Klimeck, "Model development for lattice properties of gallium arsenide using parallel genetic algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2422–2428.

[327] M. R. R. N. and Z. Kobti, "A machine operation lists based memetic algorithm for job shop scheduling," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2429–2436.

[328] J. Braun, J. Krettek, F. Hoffmann, and T. Bertram, "Structure and parameter identification of nonlinear systems with an evolution strategy," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2437–2444.

[329] Y. Wang, L. Bin, H. Zhen, and Z. Kaibo, "Enhancing differential evolution with effective evolutionary local search in memetic framework," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2445–2452.

[330] H. S. Kia and A. Cristinel, "A new fault-tolerant and congestion-aware adaptive routing algorithm for regular networks-on-chip," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2453–2460.

[331] Y. Xing, S. Mabu, and K. Hirasawa, "Pruning generalized rules for stock markets accumulated by genetic network programming with rule accumulation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2461–2467.

[332] Y.-C. Chuang and C.-T. Chen, "A study on real-coded genetic algorithm for process optimization using ranking selection, direction-based crossover and dynamic mutation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2468–2475.

[333] H. Li and Y. Wang, "A real-binary coded genetic algorithm for solving nonlinear bilevel programming with nonconvex objective functions," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2476–2480.

[334] T. Shindo, T. Kurihara, H. Taguchi, and K. Jin'no, "Particle swarm optimization for sigle phase pwm inverters," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2481–2485.

[335] L. Ki-Baek and K. Jong-Hwan, "Multi-objective particle swarm optimization with preference-based sorting," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2486–2493.

[336] W. Zhong, Y. Zhang, and J. Liu, "Evolutionary dynamics of continuous strategy games on social networks under weak selection: A preliminary study," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2494–2498.

[337] D. Srinivasan and T. T. Ly, "Co-evolutionary bidding strategies for buyers in electricity power markets," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2499–2506.

[338] D. Sharma, D. Srinivasan, and A. Trivedi, "Multi-agent approach for profit based unit commitment," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2507–2513.

[339] N. Namura, K. Shimoyama, S. Jeong, and S. Obayashi, "Kriging/rbf-hybrid response surface method for highly nonlinear functions," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2514–2521.

[340] X. fang Ji, D. wei Gong, and X. ping Ma, "Solving optimization problems with intervals and hybrid indices using evolutionary algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2522–2529.

[341] K. Masuda, H. Yokota, and K. Kurihara, "An empirical study on the search directions of differential evolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2530–2537.

[342] F. Kudo, Y. Tomohiro, and F. Takeshi, "A study on analysis of design variables in pareto solutions for conceptual design optimization problem of hybrid rocket engine," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2538–2542.

[343] Z. Zhan and J. Zhang, "Orthogonal learning particle swarm optimization for power electronic circuit optimization with free search range," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2543–2550.

[344] F. Fernandez de Vega, F. Chavez de la O, R. A. Fernandez, and F. H. Triguero, "Musical genre classification by means of fuzzy rules based systems: A preliminary approach," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2551–2557.

[345] Y. Kameya and C. Prayoonsri, "Pattern-based preservation of building blocks in genetic algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2558–2565.

[346] A. Ahmadi-Javid, "Anarchic society optimization: A human-inspired method," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2566–2572.

[347] K. Seridi, L. Jourdan, and E.-G. Talbi, "Multi-objective evolutionary algorithm for biclustering in microarrays data," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2573–2579.

[348] Z. Chen and P. Luo, "Qisa: Incorporating quantum computation into simulated annealing for optimization problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2580–2587.

[349] N. Lima and T. Ludermir, "Frankenstein pso applied to neural network weights and architectures," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2588–2592.

[350] R. Celebi and H. Kilic, "Mobile prisoner's dilemma game played on diverse habitats," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2593–2597.

[351] S. Li and J. Yuan, "The modularity in freeform evolving neural networks," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2598–2603.

[352] E.-S. Kim, J.-W. Ha, W. H. Jung, J. H. Jang, J. S. Kwon, and Z. Byoung-Tak, "Mutual information-based evolution of hypernetworks for brain data analysis," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2604–2610.

[353] S. Elsayed, R. Sarker, and D. Essam, "Integrated strategies differential evolution algorithm with a local search for constrained optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2611–2618.

[354] H. Wang, S. Rahnamayan, and Z. Wu, "Adaptive differential evolution with variable population size for solving high-dimensional problems," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2619–2625.

[355] N. Noman and H. Iba, "Solving dynamic economic dispatch problems using cellular differential evolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2626–2633.

[356] A. Esmailzadeh and S. Rahnamayan, "Enhanced differential evolution using center-based sampling," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2634–2641.

[357] R. Nagy, D. Dumitrescu, and R. I. Lung, "Fuzzy equilibria for games involving n>2 players," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2642–2648.

[358] E. Sanchez, G. Squillero, and A. Tonda, "Group evolution: Emerging synergy through a coordinated effort," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2649–2655.

[359] J. J. Merelo, A. M. Mora, and C. Cotta, "Optimizing worst-case scenario in evolutionary solutions to the mastermind puzzle," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2656–2663.

[360] A. Knittel and T. Bossomaier, "Formation and activation of feature hierarchies under reinforcement," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2664–2671.

[361] D. Ashlock, J. Schonfeld, and P. McNicholas, "Translation tables: A genetic code in an evolutionary algorithm," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2672–2679.

[362] J. Lehman and K. Stanley, "Improving evolvability through novelty search and self-adaptation," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2680–2687.

[363] K. de Bruyn, G. Nitschke, and W. van Heerden, "Evolutionary algorithms and particle swarm optimization for artificial language evolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2688–2695.

[364] M. Dorn, L. S. Buriol, and L. C. Lamb, "A hybrid genetic algorithm for the 3-d protein structure prediction problem using a path-relinking strategy," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2696–2703.

[365] I. S. Oh, Y.-G. Lee, and R. I. McKay, "Simulating chemical evolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2704–2711.

[366] A. Alford, K. Popplewell, G. Dozier, K. Bryant, J. Kelly, J. Adams, T. Abegaz, J. Shelton, K. Ricanek, and D. Woodard, "A comparison of gec-based feature selection and weighting for multimodal biometric recognition," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2712–2715.

[367] P. Kumar, S. Skinner, and D. Sahar, "Nearest-neighbor architecture to overcome the effects of qubit precessions on gate operations," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2716–2721.

[368] J.-H. Lee, B. Lee, J. S. Kim, R. Deaton, and B.-T. Zhang, "A molecular evolutionary algorithm for learning hypernetworks on simulated dna computers," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2722–2729.

[369] "Paper not in the database," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011.

[370] C. Azevedo and A. Araujo, "Correlation between diversity and hypervolume in evolutionary multiobjective optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2730–2737.

[371] S. Eppe, M. Lopez-Ibanez, T. Stuetzle, and Y. De Smet, "An experimental study of preference model integration into multi-objective optimization heuristics," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2738–2745.

[372] E. Tantar, A.-A. Tantar, and B. Pascal, "On dynamic multi-objective optimization, classification and performance measures," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2746–2753.

[373] J. Xiong, J. Liu, Y. Chen, and H. Abbass, "An evolutionary multi-objective scenario-based approach for stochastic resource investment project scheduling," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2754–2761.

[374] D. Munoz, C. Llanos, L. Coelho, and M. Ayala, "Opposition-based shuffled pso with passive congregation applied to fm matching synthesis," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2762–2768.

[375] S. Bandaru, C. C. Tutum, K. Deb, and J. H. Hattel, "Higher-level innovization: A case study from friction stir welding process optimization," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2769–2776.

[376] Y. Sakurai, K. Takada, N. Tsukamoto, T. Onoyama, R. Knauf, and S. Tsuruta, "A simple optimization method based on backtrack and ga for delivery schedule," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, Ed., IEEE Computational Intelligence Society. New Orleans, USA: IEEE Press, 5-8 June 2011, pp. 2777–2784.