## Список литературы

- 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., pp. 1–5, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 6–13, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 14–20, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 21–28, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 29–36, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 37–44, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 45–53, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 54–61, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 62–69, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 70–77, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 78–83, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 84–88, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 89–94, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 95–101, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 102–109, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 110–114, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 115–122, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 123–129, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 130–136, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 137–144, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 145–151, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 152–157, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 158–163, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 164–171, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 172–178, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 179–185, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 186–191, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 192–199, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 200–207, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 208–215, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 216–221, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 222–229, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 230–237, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 238–245, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 246–253, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 254–261, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 262–268, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 269–276, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 277–284, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 285–291, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 292–295, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 296–303, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 304–311, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 312–317, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 318–325, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 326–330, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 331–338, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 339–346, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 347–353, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 354–361, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 362–369, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 370–377, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 378–385, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 386–393, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 394–400, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 401–408, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 409–416, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 417–425, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 426–431, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 432–439, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 440–446, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 447–454, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [63] F. Dobslaw, "Iteration-wise Parameter Learning," in Proceedings of the 2011 IEEE Congress on Evolutionary Computation, A. E. Smith, ed., pp. 455–462, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 463–467, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 468–475, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [66] F. Mokom and Z. Kobti, "Evolution of Artifact Capabilities," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, ed., pp. 476–483, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 484–490, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 491–495, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 496–503, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 504–508, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 509–516, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 517–521, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 522–528, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 529–536, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 537–543, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 544–549, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 550–557, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 558–565, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 566–573, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 574–579, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [81] D. Rivero, E. Fernandez-Blanco, J. Dorado, and A. Pazos, "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., pp. 580–585, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 586–593, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 594–600, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 601–608, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 609–616, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 617–624, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 625–631, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 632–639, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 640–647, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 648–654, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 655–664, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 665–672, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 673–678, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 679–684, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 685–692, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 693–700, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 701–706, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 707–714, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 715–722, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 723–730, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 731–736, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 737–743, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 744–751, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 752–759, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 760–766, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 767–771, IEEE Computational Intelligence Society. New Orleans, USA, 5-8 june, 2011.
- [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., pp. 772–779, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 780–787, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 788–794, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 795–801, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 802–810, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 811–818, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 819–826, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 827–834, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 835–840, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 841–847, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 848–855, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 856–863, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 864–871, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 872–878, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 879–884, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 885–892, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 893–900, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 901–907, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [125] T. Menezes, "Evolutionary Modeling of a Blog Network," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, ed., pp. 908–915, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 916–923, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 924–931, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 932–939, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 940–947, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 948–955, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 956–963, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 964–971, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 972–979, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 980–987, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 988–993, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [136] G. Peterson, C. Mayer, and K. Cousin, "WoLF Ant," in Proceedings of the 2011 IEEE Congress on Evolutionary Computation, A. E. Smith, ed., pp. 994–1001, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1002–1010, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1011–1018, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1019–1025, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1026–1032, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1033–1039, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [142] S. Elsayed, R. Sarker, and D. Essam, "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., pp. 1040–1047, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1048–1055, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1056–1061, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1062–1069, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1070–1075, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1076–1082, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1083–1090, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1091–1098, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1099–1106, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1107–1114, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1115–1122, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1123–1130, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1131–1136, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1137–1144, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1145–1152, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1153–1159, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [158] P. Hingston and M. Preuss, "Red Teaming with Coevolution," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, ed., pp. 1160–1168, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1169–1176, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1177–1183, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1184–1190, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1191–1198, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1199–1206, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1207–1213, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1214–1221, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1222–1229, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1230–1237, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [168] R. Reynolds and D. Liu, "Multi-Objective Cultural Algorithms," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, ed., pp. 1238–1246, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1247–1254, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1255–1262, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1263–1270, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1271–1278, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [173] B. Eskridge, "Extrapolation of Regularity Using Indirect Encodings," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, ed., pp. 1279–1286, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1287–1294, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1295–1300, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1301–1306, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1307–1313, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1314–1320, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1321–1325, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1326–1333, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1334–1341, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1342–1348, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1349–1357, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1358–1365, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1366–1373, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1374–1380, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1381–1386, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1387–1394, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1395–1402, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1403–1410, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1411–1418, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1419–1426, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1427–1434, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1435–1442, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1443–1450, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1451–1455, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1456–1463, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1464–1471, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1472–1479, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1480–1487, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1488–1494, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1495–1502, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1503–1507, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1508–1513, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1514–1519, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1520–1527, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1528–1533, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1534–1541, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1542–1549, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1550–1555, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1556–1563, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1564–1571, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1572–1579, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1580–1587, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1588–1595, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1596–1603, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1604–1611, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1612–1618, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1619–1626, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1627–1634, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1635–1642, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1643—1647, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1648–1655, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [224] C. Monson, "Simple Adaptive Cognition for PSO," in Proceedings of the 2011 IEEE Congress on Evolutionary Computation, A. E. Smith, ed., pp. 1656–1663, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1664–1670, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1671–1677, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1678–1685, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1686–1693, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1694–1701, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1702–1709, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1718–1722, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1723–1728, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1729–1736, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1737–1744, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1745–1752, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [236] H. Zhang, "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., pp. 1753–1760, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1761–1768, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1769–1775, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1776–1783, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1784–1791, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1792–1797, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1798–1803, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1804–1809, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1810–1816, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1817–1824, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1825–1831, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1832–1838, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1839–1846, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1847–1854, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1855–1862, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1863–1870, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1871–1877, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1878–1885, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1886–1893, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1894–1900, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1901–1904, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1905–1910, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1911–1918, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1919–1925, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1926–1932, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1933–1939, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1940–1948, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1949–1956, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1957–1964, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1965–1970, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1971–1976, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 1977–1984, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1985–1992, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 1993–2000, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2001–2008, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2009–2015, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2016–2023, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2024–2031, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2032–2039, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2040–2047, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2048–2055, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2056–2059, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2060–2067, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2068–2075, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2076–2083, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2084–2091, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2092–2099, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2100–2107, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2108–2115, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2116–2123, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2124–2131, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [287] A. Lockett and R. Miikkulainen, "Measure-Theoretic Evolutionary Annealing," in *Proceedings* of the 2011 IEEE Congress on Evolutionary Computation, A. E. Smith, ed., pp. 2132–2139, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2140–2147, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2148–2155, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2156–2162, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2163–2170, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2171–2178, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2179–2185, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2186–2192, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2193–2199, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2200–2207, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2208–2215, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2216–2221, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2222–2229, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2230–2237, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2238–2244, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2245–2251, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2252–2259, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2260–2264, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2265–2272, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2273–2277, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2278–2285, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2286–2292, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2293–2299, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2300–2307, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2308–2313, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2314–2321, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2322–2329, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2330–2337, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2338–2343, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2344–2351, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2352–2359, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2360–2367, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2368–2375, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2376–2383, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2384–2391, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2392–2399, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2400–2407, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2408–2415, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2416–2421, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2422–2428, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2429–2436, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2437–2444, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2445–2452, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2453–2460, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2461–2467, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2468–2475, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2476–2480, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2481–2485, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2486–2493, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2494–2498, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2499–2506, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2507–2513, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2514–2521, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2522–2529, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2530–2537, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2538–2542, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2543–2550, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2551–2557, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2558–2565, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2566–2572, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2573–2579, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2580–2587, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2588–2592, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2593–2597, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2598–2603, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2604–2610, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2611–2618, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2619–2625, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2626–2633, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2634–2641, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2642–2648, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2649–2655, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2656–2663, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2664–2671, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2672–2679, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2680–2687, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2688–2695, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2696–2703, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2704–2711, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2712–2715, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2716–2721, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2722–2729, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [369] "Paper not in the database," in *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, A. E. Smith, ed., IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 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., pp. 2730–2737, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2738–2745, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2746–2753, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2754–2761, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2762–2768, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.

- [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., pp. 2769–2776, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.
- [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., pp. 2777–2784, IEEE Computational Intelligence Society. IEEE Press, New Orleans, USA, 5-8 june, 2011.