Список литературы

- [] Amit Banerjee and Issam Abu-Mahfouz. Evolutionary algorithm-based parameter identification for nonlinear dynamical systems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1–5, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Anne Raich and Kyle Fritz. Benefits of implicit redundant representation genetic algorithms for conceptual design and damage identification. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 6–13, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Masoud Mirmomeni and William Punch. Co-evolving data driven models and test data sets with the application to forecast chaotic time series. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 14–20, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mouadh Yagoubi, Ludovic Thobois, and Marc Schoenauer. Asynchronous evolutionary multiobjective algorithms with heterogenous evaluation costs. In Alice E. Smith, editor, *Proceedings* of the 2011 IEEE Congress on Evolutionary Computation, pages 21–28, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Afonso Lemonge, Michelli Silva, and Helio Barbosa. Design optimization of geometrically nonlinear truss structures considering cardinality constraints. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 29–36, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Xianneng Li, Bing Li, Shingo Mabu, and Kotaro Hirasawa. A novel estimation of distribution algorithm using graph-based chromosome representation and reinforcement learning. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 37–44, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Shih-Hsin Chen and Min-Chih Chen. Bi-variate artificial chromosomes with genetic algorithm for single machine scheduling problems with sequence-dependent setup times. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 45–53, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Cristiano Pitangui and Gerson Zaverucha. Inductive logic programming through estimation of distribution algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 54–61, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Andre R. Goncalves and Fernando J. Von Zuben. Online learning in estimation of distribution algorithms for dynamic environments. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 62–69, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Philipp Rohlfshagen and Simon Lucas. Ms pac-man versus ghost team cec 2011 competition. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 70–77, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Li Junqing, Pan Quanke, and Xie Shengxian. Flexible job shop scheduling problems by a hybrid artificial bee colony algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 78–83, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Celal Ozturk and Dervis Karaboga. Hybrid artificial bee colony algorithm for neural network training. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 84–88, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- Bahriye Akay and Dervis Karaboga. Wavelet packets optimization using artificial bee colony algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 89–94, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Tuncay Ozcan and Sakir Esnaf. A heuristic approach based on artificial bee colony algorithm for retail shelf space optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 95–101, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Shawn Aldridge, Brendan Babb, Frank Moore, and Michael Peterson. Improved reconstruction of deep space images via genetic algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 102–109, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Haluk Yapicioglu and Alice E. Smith. Disservice representation using the gini coefficient in semi-desirable facility location problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 110–114, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Cesar Andres, Luis Llana, and Manuel Nunez. Self-adaptive fuzzy-timed systems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 115–122, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Helbert Espitia and Jorge Sofrony. Path planning of mobile robots using potential fields and swarms of brownian particles. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 123–129, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Dun wei Gong, Cheng liang Qi, Yong Zhang, and Ming Li. Modified particle swarm optimization for odor source localization of multi-robot. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 130–136, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hideru Hiruma, Alex Fukunaga, Kazuki Komiya, and Hitoshi Iba. Evolving an effective robot tour guide. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 137–144, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Alan Jennings and Raul Ordonez. Population based optimization for variable operating points. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 145–151, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] In-Bae Jeong, Chang-Soo Park, Ki-In Na, Seungbeom Han, and Jong-Hwan Kim. Particle swarm optimization-based central patter generator for robotic fish locomotion. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 152–157, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Giuseppe Cuccu, Faustino Gomez, and Tobias Glasmachers. Novelty-based restarts for evolution strategies. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 158–163, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Nobusumi Fukushima, Yuichi Nagata, Shigenobu Kobayashi, and Isao Ono. Proposal of distance-weighted exponential natural evolution strategies. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 164–171, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Eddy Parkinson, Adam Ghandar, Zbigniew Michalewicz, and Andrew Tuson. Estimating the reproductive potential of offspring in evolutionary heuristics for combinatorial optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 172–178, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Takeshi Uchitane and Toshiharu Hatanaka. Applying evolution strategies to biped locomotion learning in robocup 3d soccer simulation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 179–185, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Andreas Krause. Performance of evolving trading strategies with different discount factors. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 186–191, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Dome Lohpetch and David Corne. Multiobjective algorithms for financial trading multiobjective out-trades single-objective. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 192–199, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Joao Palotti, Thiago Salles, Gisele L. Pappa, Marcos A. Goncalves, and Wagner Meira, Jr. Assessing documents' credibility with genetic programming. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 200–207, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Omer Qadir, Jerry Liu, Gianluca Tempesti, Jon Timmis, and Andy Tyrrell. Hardware architecture for a bidirectional hetero-associative protein processing associative memory. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 208–215, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Enrico Heinrich, Ralf Joost, and Ralf Salomon. Learning from the barn owl auditory system: A bio-inspired localization hardware architecture. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 216–221, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Gregor Papa and Tomasz Garbolino. Optimal on-line built-in self-test structure for system-reliability improvement. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 222–229, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Antonio Gomez Zamorano, Jon Timmis, and Andy Tyrrell. A flexible decentralised communication architecture on a field programmable gate array for swarm system simulations. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 230–237, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Atkins, Kourosh Neshatian, and Mengjie Zhang. A domain independent genetic programming approach to automatic feature extraction for image classification. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 238–245, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Setayesh Mahdi, Zhang Mengjie, and Johnston Mark. Edge detection using constrained discrete particle swarm optimisation in noisy images. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 246–253, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Wenlong Fu, Mark Johnston, and Mengjie Zhang. Genetic programming for edge detection: A global approach. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 254–261, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Man Wong, Xiangjian He, and Wei chang Yeh. Image clustering using particle swarm optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 262–268, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Zdenek Vasicek and Michal Bidlo. Evolutionary design of robust noise-specific image filters. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 269–276, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Uday Kamath, Kenneth De Jong, and Amarda Shehu. An evolutionary-based approach for feature generation: Eukaryotic promoter recognition. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 277–284, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Matthias Becker. Design of fault tolerant networks with agent-based simulation of physarum polycephalum. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 285–291, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Ahmadreza Ghaffarizadeh, Kamilia Ahmadi, and Nicholas S. Flann. Sorting unsigned permutations by reversals using multi-objective evolutionary algorithms with variable size individuals. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 292–295, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yuji Sato, Naohiro Hasegawa, and Mikiko Sato. Gpu acceleration for sudoku solution with genetic operations. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 296–303, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Maribel Garcia-Arenas, Juan Julian Merelo, Antonio M. Mora, Pedro Castillo, and Gustavo Romero. Assessing speed-ups in commodity cloud storage services for distributed evolutionary algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 304–311, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Masaharu Munetomo. Realizing robust and scalable evolutionary algorithms toward exascale era. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 312–317, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Asim Munawar, Mohamed Wahib, Masaharu Munetomo, and Kiyoshi Akama. Advanced genetic algorithm to solve minlp problems over gpu. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 318–325, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Selcuk Okdem, Dervis Karaboga, and Celal Ozturk. An application of wireless sensor network routing based on artificial bee colony algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 326–330, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Beatriz A Garro, Humberto Sossa, and Roberto A Vazquez. Artificial neural network synthesis by means of artificial bee colony (abc) algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 331–338, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Adalet Oner, Sel Ozcan, and Derya Dengi. Optimization of university course scheduling problem with a hybrid artificial bee colony algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 339–346, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] M. Fatih Tasgetiren, Onder Bulut, and M. Murat Fadiloglu. A discrete artificial bee colony algorithm for the economic lot scheduling problem. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 347–353, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Ahmad Faisal Mohamad Ayob, Tapabrata Ray, and Warren Smith. Scenario-based hydrodynamic design optimization of high speed planing craft for coastal surveillance. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 354–361, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- David Wilcox, Andrew McNabb, and Kevin Seppi. Solving virtual machine packing with a reordering grouping genetic algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 362–369, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Neil Paiva Tizzo, Juan Manuel Adan Coello, and Eleri Cardozo. Automatic composition of semantic web services using a-teams with genetic agents. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 370–377, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Leon Poladian. A genotype-to-phenotype mapping for microstructured polymer optical fibres. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 378–385, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Rosana Veroneze, Fabricio de Franca, and Fernando J. Von Zuben. Assessing the performance of a swarm-based biclustering technique for data imputation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 386–393, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Deng Zhang, Shingo Mabu, Feng Wen, and Kotaro Hirasawa. A sequential subspace face recognition framework using genetic-based clustering. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 394–400, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Deepti Dohare and V. Susheela Devi. Combination of similarity measures for time series classification using genetic algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 401–408, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Eun Yeong Ahn, Tracy Mullen, and John Yen. Evolutionary based feature extraction with dynamic mutation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 409–416, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] John Gallagher and Michael Oppenheimer. An improved evolvable oscillator for all flight mode control of an insect-scale flapping-wing micro air vehicle. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 417–425, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Matthew Kijowski, John Gallagher, and Laurence Merkle. Improved learning in an evolvable hardware hover controller for an insect scale flapping-wing micro air vehicle. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 426–431, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Rui Li, Ramin Etemaadi, Michael Emmerich, and Michael Chaudron. An evolutionary multiobjective optimization approach to component-based software architecture design. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 432–439, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- Paul Bremner, Mohammad Samie, Anthony Pipe, and Andy Tyrrell. Multi-objective optimisation of cell-array circuit evolution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 440–446, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Shuhei Kimura and Koki Matsumura. Constrained multimodal function optimization using a simple evolutionary algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 447–454, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Felix Dobslaw. Iteration-wise parameter learning. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 455–462, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Garrison Greenwood. On the value of operator-induced neighborhoods in fitness landscapes. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 463–467, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- John Doucette and Malcolm Heywood. Revisiting the acrobot 'height' task: An example of efficient evolutionary policy search under an episodic goal seeking task. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 468–475, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Felicitas Mokom and Ziad Kobti. Evolution of artifact capabilities. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 476–483, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Luis Gerardo De la Fraga and Gustavo M. Lopez Dominguez. Robust detection of several circles or ellipses with heuristics. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 484–490, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hoang Thanh Nguyen and Bir Bhanu. Tracking pedestrians with bacterial foraging optimization swarms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 491–495, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Qiao Shi and Andy Song. Selective motion detection by genetic programming. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 496–503, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Jiulei Geng and Jing Liu. Image texture classification using a multiagent genetic clustering algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 504–508, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Moayed Daneshyari and Gary Yen. Dynamic optimization using cultural based pso. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 509–516, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Leandro Coelho, Diego Bernert, and Viviana Mariani. A chaotic firefly algorithm applied to reliability-redundancy optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 517–521, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Viviana Mariani, Luiz Guilherme Luvizotto, Carlos Klein, and Leandro Coelho. A normative differential evolution approach for estimation of heat transfer coefficient during freezing treatment by inverse analysis. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 522–528, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- Jesica de Armas, Gara Miranda, and Coromoto Leon. Two encoding schemes for a multiobjective cutting stock problem. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 529–536, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Omar Vilela Neto, Marco Aurelio Pacheco, Andre Pimentel, and Enio Silveira. A parallel evolutionary algorithm to search for global minima geometries of heterogeneous ab initio atomic clusters. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 537–543, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Omar Vilela Neto, Iury Bezerra, Marco Aurelio Pacheco, and Andre Pimentel. Evolutionary optimization of sets of basis functions for first-row atoms by using discretization process. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 544–549, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Robert Green, II, Lingfeng Wang, Mansoor Alam, and Richard Formato. Central force optimization on a gpu: A case study in high performance metaheuristics using multiple topologies. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 550–557, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Jia Liping and Wang Yuping. Genetic algorithm based on primal and dual theory for solving multiobjective bilevel linear programming. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 558–565, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Igor Rosberg, Elizabeth Goldbarg, and Marco Goldbarg. Solving the light up with ant colony optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 566–573, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Rivero, Enrique Fernandez-Blanco, Julian Dorado, and Alejandro Pazos. A new signal classification technique by means of genetic algorithms and knn. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 574–579, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Rivero, Enrique Fernandez-Blanco, Julian Dorado, and Alejandro Pazos. Using recurrent anns for the detection of epileptic seizures in eeg signals. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 580–585, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Paulo Asconavieta, Marco Goldbarg, and Elizabeth Goldbarg. Evolutionary algorithm for the car renter salesman. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 586–593, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Lara Menezes and Andre Coelho. On ensembles of biclusters generated by nichepso. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 594–600, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Muhannad Hijaze and David Corne. Distributed evolutionary algorithm topologies with adaptive migration schemes. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 601–608, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Marcelo Lotif and Andre Coelho. Visually inspecting the search behavior of harmony search and its variants with viz3d. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 609–616, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Luigi Cardamone, Andrea Mocci, and Carlo Ghezzi. Dynamic synthesis of program invariants using genetic programming. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 617–624, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Fabricio de Franca and Fernando J. Von Zuben. Extracting additive and multiplicative coherent biclusters with swarm intelligence. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 625–631, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Antonio Gonzalez-Pardo and David Camacho. Analysis of grammatical evolution approaches to regular expression induction. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 632–639, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Jose Estevez, Pedro Toledo, and Silvia Alayon. Using an induced relational decision tree for rule injection in a learning classifier system. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 640–647, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mohammad Khan, Ahmad Ayob, Amitay Isaacs, and Tapabrata Ray. A novel evolutionary approach for 2d shape matching based on b-spline modeling. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 648–654, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Naoki Hamada, Yuichi Nagata, Shigenobu Kobayashi, and Isao Ono. On scalability of adaptive weighted aggregation for multiobjective function optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 655–664, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Roberto A Vazquez. Training spiking neural models using cuckoo search algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 665–672, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Masashi Oiso, Yoshiyuki Matsumura, Toshiyuki Yasuda, and Kazuhiro Ohkura. Accelerating steady-state genetic algorithms based on cuda architecture. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 673–678, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Eulanda M. Dos Santos and Robert Sabourin. Classifier ensembles optimization guided by population oracle. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 679–684, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Bado Lee, Ho-Sik Seok, and Byoung-Tak Zhang. Evolving a population code for multimodal concept learning. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 685–692, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Marco Carpentieri. On robustness of permutations sequencing operators: Solving satisfiability of random 3-cnfs by simple crossover. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 693–700, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hector Lugo-Cordero, Abigail Fuentes-Rivera, Ratan Guha, and Eduardo Ortiz-Rivera. Particle swarm optimization for load balancing in green smart homes. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 701–706, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- Osama Hassanein, Sreenatha Anavatti, and Tapabrata Ray. Genetic fuzzy controller for robot manipulator position control based upon inverse dynamics. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 707–714, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Zhu Wang, Rui Yang, Lingfeng Wang, Robert Green, II, and Anastasios Dounis. A fuzzy adaptive comfort temperature model with grey predictor for multi-agent control system of smart building. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 715–722, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Eun Yeong Ahn, Tracy Mullen, and John Yen. A two-population evolutionary algorithm for feature extraction: Combining filter and wrapper. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 723–730, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Chi Keong Goh, Dudy Lim, Li Ma, Yew Soon Ong, and Partha Dutta. A surrogate-assisted memetic co-evolutionary algorithm for expensive constrained optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 731–736, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Udit Halder, Swagatam Das, Dipankar Maity, Ajith Abraham, and Dasgupta Preetam. Self adaptive cluster based and weed inspired differential evolution algorithm for real world optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 737–743, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Ghosh Pradipta, Zafar Hamim, Swagatam Das, and Ajith Abraham. Hierarchical dynamic neighborhood based particle swarm optimization for global optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 744–751, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mohammed Nasir, A. Mondal, S. Sengupta, Swagatam Das, and Ajith Abraham. An improved multiobjective evolutionary algorithm based on decomposition with fuzzy dominance. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 752–759, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Danielle Silva, Luciano Pacifico, and Teresa Ludermir. An evolutionary extreme learning machine based on group search optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 760–766, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Ahmed Haidar, Khaled Noman, Rashad Al-Jawfi, and Hazizulden Abdul Aziz. An intelligent placement of distributed capacitance based on loss minimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 767–771, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society.
- Brian Ross. Evolution of stochastic bio-networks using summed rank strategies. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 772–779, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Ashlock, Elisabeth Shiller, and Colin Lee. Comparison of evolved epidemic networks with diffusion characters. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 780–787, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Gordon Vansant, Pat Pezzoli, Joseph Monforte, and Gary Fogel. High-throughput toxicological classification of candidate drug compounds using gene expression, evolved neural networks, and a cell-based platform. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 788–794, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- Pavel Kromer, Jan Platos, and Vaclav Snasel. Differential evolution for the linear ordering problem implemented on cuda. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 795–801, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mohamed Wahib, Asim Munawar, Masaharu Munetomo, and Kiyoshi Akama. Optimization of parallel genetic algorithms for nvidia gpus. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 802–810, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Shigeyoshi Tsutsui and Noriyuki Fujimoto. Fast qap solving by aco with 2-opt local search on a gpu. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 811–818, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yiyuan Gong and Alex Fukunaga. Distributed island-model genetic algorithms using heterogeneous parameter settings. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 819–826, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Ashlock and Sylvia Nguyen. Financial control of the evolution of autonomous npcs. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 827–834, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Elio Piccolo and Giovanni Squillero. Adaptive opponent modelling for the iterated prisoner's dilemma. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 835–840, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Eduardo Vazquez, Carlos A. Coello Coello, and Feliu Sagols. An evolutionary algorithm for tuning a chess evaluation function. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 841–847, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Ashlock and Cameron McGuinness. Decomposing the level generation problem with tiles. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 848–855, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Saber Elsayed, Ruhul Sarker, and Daryl Essam. Ga with a new multi-parent crossover for constrained optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 856–863, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Noha Hamza, Saber Elsayed, Ruhul Sarker, and Daryl Essam. Differential evolution combined with constraint consensus for constrained optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 864–871, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Leslie Perez and Maria-Cristina Riff. New bounds for the relaxed traveling tournament problems using an artificial immune algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 872–878, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Owen Clancey and Matthew Witten. A memetic algorithm for dosimetric optimization in cyberknife robotic radiosurgical treatment planning. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 879–884, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] ManChon U, Chiahsun Ho, Shelby Funk, and Khaled Rasheed. Gart: A genetic algorithm based real time system scheduler. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 885–892, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Alan Reynolds, Asaad Abdollahzadeh, David Corne, Mike Christie, Brian Davies, and Glyn Williams. A parallel boa-pso hybrid algorithm for history matching. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 893–900, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Cem Celal Tutum and Zhun Fan. Multi-criteria layout synthesis of mems devices using memetic computing. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 901–907, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Telmo Menezes. Evolutionary modeling of a blog network. In Alice E. Smith, editor, *Proceedings* of the 2011 IEEE Congress on Evolutionary Computation, pages 908–915, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Pu Wang, Ke Tang, Edward Tsang, and Xin Yao. A memetic genetic programming with decision tree-based local search for classification problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 916–923, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Zilton Cordeiro Junior and Gisele L. Pappa. A pso algorithm for improving multi-view classification. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 924–931, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Rafael Carvalho, Gustavo Brunoro, and Gisele L. Pappa. Hcga: A genetic algorithm for hierarchical classification. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 932–939, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Anna Friedlander, Kourosh Neshatian, and Mengjie Zhang. Meta-learning and feature ranking using genetic programming for classification: Variable terminal weighting. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 940–947, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Luigi Malago', Matteo Matteucci, and Giovanni Pistone. Stochastic natural gradient descent by estimation of empirical covariances. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 948–955, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Luis Marti, Jesus Garcia, Antonio Berlanga, and Jose M. Molina. Indicator-based moneda: A comparative study of scalability with respect to decision space dimensions. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 956–963, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Liliam Leal, Marcus Lemos, Raimir Holanda, Ricardo Rabelo, and Fabbio Borges. A hybrid approach based on genetic fuzzy systems for wireless sensor networks. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 964–971, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Bing Li, Xianneng Li, Shingo Mabu, and Kotaro Hirasawa. Variable size genetic network programming with binomial distribution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 972–979, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Yanghui Wu, John McCall, and David Corne. Fitness landscape analysis of bayesian network structure learning. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 980–987, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hannes Muehleisen, Tilman Walther, and Robert Tolksdorf. Multi-level indexing in a distributed self-organized storage system. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 988–993, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Gilbert Peterson, Christopher Mayer, and Kevin Cousin. Wolf ant. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 994–1001, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Md Kamrul Islam, Madhu Chetty, and Manzur Murshed. Novel local improvement techniques in clustered memetic algorithm for protein structure prediction. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1002–1010, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Ahsan Raja Chowdhury and Madhu Chetty. An improved method to infer gene regulatory network using s-system. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1011–1018, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Steven Corns. On the effects of graph based evolutionary algorithms for training finite state classifiers. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1019–1025, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Antonio LaTorre, Santiago Muelas, and Jose-Maria Pena. Benchmarking a hybrid de-rhc algorithm on real world problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1026–1032, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Saber Elsayed, Ruhul Sarker, and Daryl Essam. Ga with a new multi-parent crossover for solving ieee-cec2011 competition problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1033–1039, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Saber Elsayed, Ruhul Sarker, and Daryl Essam. Differential evolution with multiple strategies for solving cec2011 real-world numerical optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1040–1047, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Amit Saha and Tapabrata Ray. How does the good old genetic algorithm fare at real world optimization? In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1048–1055, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Md. Asafuddoula, Tapabrata Ray, and Ruhul Sarker. An adaptive differential evolution algorithm and its performance on real world optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1056–1061, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Ashlock, Christopher Kuusela, and Monica Cojocaru. Shopkeeper strategies in the iterated prisoner's dilemma. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1062–1069, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Gary Parker and Phil Fritzsche. Fitness biasing for evolving an xpilot combat agent. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1070–1075, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Adam Dziuk and Risto Miikkulainen. Creating intelligent agents through shaping of coevolution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1076–1082, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Phillipa Avery, Julian Togelius, Alistar Elvis, and Robert Pieter van Leeuwen. Computational intelligence and tower defence games. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1083–1090, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Feng Liang, Ong Yew-Soon, Tan Ah-Hwee, and Chen Xian-Shun. Towards human-like social multi-agents with memetic automaton. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1091–1098, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Viljoen Carina, Nitschke Geoff, and Willem van Heerden. Evolution of a fictional dialogue. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1099–1106, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Ashlock and Joseph Brown. Fitness functions for searching the mandelbrot set. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1107–1114, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Joseph Alexander Brown, Daniel Ashlock, Sheridan Houghten, and John Orth. Autogeneration of fractal photographic mosaic images. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1115–1122, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Carlos M. Fernandes, Carlos Isidoro, Fabio Barata, Agostinho C. Rosa, and Juan Julian Merelo. From pherographia to color pherographia color sketching with artificial ants. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1123–1130, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Malik Nairat, Palle Dahlstedt, and Mats Nordahl. Character evolution approach to generative storytelling. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1131–1136, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Eduardo Segredo, Carlos Segura, and Coromoto Leon. A multiobjectivised memetic algorithm for the frequency assignment problem. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1137–1144, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Corrado Coia and Brian Ross. Automatic evolution of conceptual building architectures. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1145–1152, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Logenthiran Thillainathan and Dipti Srinivasan. Lrga for solving profit based generation scheduling problem in competitive environment. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1153–1159, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Philip Hingston and Mike Preuss. Red teaming with coevolution. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 1160–1168, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- David F. Barrero, Maria R-Moreno, Bonifacio Castano, and David Camacho. An empirical study on the accuracy of computational effort in genetic programming. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1169–1176, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] John Aleshunas and Cezary Janikow. Cost-benefit analysis of using heuristics in acgp. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1177–1183, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Thi Hien Nguyen, Xuan Hoai Nguyen, and Robert Ian McKay. A study on genetic programming with layered learning and incremental sampling. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1184–1190, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Carlton Downey and Mengjie Zhang. Execution trace caching for linear genetic programming. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1191–1198, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Claudio Toledo, Renato Oliveira, and Paulo Franca. A hybrid heuristic approach to solve the multi level capacitated lot sizing problem. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1199–1206, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Martin Pilat and Roman Neruda. Asm-moma: Multiobjective memetic algorithm with aggregate surrogate model. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1207–1213, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Stephanus Daniel Handoko, Chee Keong Kwoh, Yew Soon Ong, and Jonathan Chan. Classification-assisted memetic algorithms for solving optimization problems with restricted equality constraint function mapping. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1214–1221, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Andre Cruz, Rodrigo Cardoso, Elizabeth Wanner, and Ricardo Takahashi. Using convex quadratic approximation as a local search operator in evolutionary multiobjective algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1222–1229, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mostafa Ali, Ayad Salhieh, Randa Abu Snaineh, and Robert Reynolds. Boosting cultural algorithms with an incongruous layered social fabric influence function. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1230–1237, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Robert Reynolds and Dapeng Liu. Multi-objective cultural algorithms. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 1238–1246, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Guilherme Coelho, Fabricio de Franca, and Fernando J. Von Zuben. A concentration-based artificial immune network for combinatorial optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1247–1254, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Pablo Castro and Fernando J. Von Zuben. Training multilayer perceptrons with a gaussian artificial immune system. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1255–1262, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Konstantinos Antonakopoulos and Gunnar Tufte. A common genetic representation capable of developing distinct computational architectures. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1263–1270, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Till Steiner and Bernhard Sendhoff. Evolvability of graph- and vector field embryogeny representations. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1271–1278, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Brent Eskridge. Extrapolation of regularity using indirect encodings. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1279–1286, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Herbert H. Tsang and Christian Jacob. Rnadpcompare: An algorithm for comparing rna secondary structures based on image processing techniques. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1287–1294, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- David Marco, David Cairns, and Carron Shankland. Optimisation of process algebra models using evolutionary computation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1295–1300, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Amin Yazdani Salekdeh and Kay C. Wiese. Improving splice-junctions classification employing a novel encoding schema and decision-tree. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1301–1306, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Laurence Amaral and Estevam Hruschka. Transgenic, an operator for evolutionary algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1307–1313, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yu Wang, Bin Li, and Kaibo Zhang. Estimation of distribution and differential evolution cooperation for real-world numerical optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1314–1320, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hemant Kumar Singh and Tapabrata Ray. Performance of a hybrid ea-de-memetic algorithm on cec 2011 real world optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1321–1325, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Peter Korosec and Jurij Silc. The continuous differential ant-stigmergy algorithm applied to real-world optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1326–1333, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Sunith Bandaru, Rupesh Tulshyan, and Kalyanmoy Deb. Modified sbx and adaptive mutation for real world single objective optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1334–1341, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Tom Schaul, Yi Sun, Daan Wierstra, Faustino Gomez, and Juergen Schmidhuber. Curiosity-driven optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1342–1348, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Carlos Cobos, Martha Mendoza, and Elizabeth Leon. A hyper-heuristic approach to design and tuning heuristic methods for web document clustering. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1349–1357, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Rafael Falcon, Marcio Almeida, and Amiya Nayak. Fault identification with binary adaptive fireflies in parallel and distributed systems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1358–1365, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Manuel Chica, Oscar Cordon, and Sergio Damas. Tackling the 1/3 variant of the time and space assembly line balancing problem by means of a multiobjective genetic algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1366–1373, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Tamirat Abegaz, Gerry Dozier, Kelvin Bryant, Joshua Adams, Joseph Shelton, Ricanek Karl, and Damon Woodard. Ssga and eda based feature selection and weighting for face recognition. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1374–1380, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Breno C. Costa, Paulo E. M. Almeida, and Evandro Caldeira. Traffic lights timing inside microregion simulator using multiobjective optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1381–1386, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Stefan Menzel. Evolvable free-form deformation control volumes for evolutionary design optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1387–1394, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Ralph Moritz, Tamara Ulrich, Lothar Thiele, and Susanne Buerklen. Mutation operator characterization: Exhaustiveness, locality, and bias. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1395–1402, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Seamus Hill and Colm 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 Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1403–1410, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Antoine Dymond, Andries P. Engelbrecht, and Stephan Heyns. The sensitivity of single objective optimization algorithm control parameter values under different computational constraints. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1411–1418, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Charalambos Ioannides, Kerstin Eder, and Geoff Barrett. Improving xcs performance on overlapping binary problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1419–1426, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Richard J. Preen and Larry Bull. Arithmetic dynamical genetic programming in the xcsf learning classifier system. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1427–1434, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Cecilia Sonstrod, Ulf Johansson, and Rikard Konig. Evolving accurate and comprehensible classification rules. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1435–1442, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Ulf Johansson, Cecilia Sonstrod, and Tuve Lofstrom. One tree to explain them all. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1443–1450, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Jong-Won Yoon and Sung-Bae Cho. An efficient genetic algorithm with fuzzy c-means clustering for traveling salesman problem. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1451–1455, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Regina M. Azuma, Guilherme Coelho, and Fernando J. Von Zuben. Evolutionary multi-objective optimization for the vendor-managed inventory routing problem. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1456–1463, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hisao Ishibuchi, Naoya Akedo, Hiroyuki Ohyanagi, and Yusuke Nojima. Behavior of emo algorithms on many-objective optimization problems with correlated objectives. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1464–1471, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Tsung-Che Chiang and Yung-Pin Lai. Moea/d-ams: Improving moea/d by an adaptive mating selection mechanism. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1472–1479, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Ghandar Adam and Michalewicz Zbigniew. Using cellular evolution for diversification of the balance between accurate and interpretable fuzzy knowledge bases for classification. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1480–1487, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Shi Chuan, Yan Zhenyu, Pan Xin, Cai Yanan, and Wu Bin. Multi-objective decisionmaking in the detection of comprehensive community structures. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1488–1494, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mehmet Ergezer and Dan Simon. Oppositional biogeography-based optimization for combinatorial problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1495–1502, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Lee Graham, John Borbone, and Gary Parker. Comparison of a greedy selection operator to tournament selection and a hill climber. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1503–1507, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Gary Parker and William Tarimo. The effects of using a greedy factor in hexapod gait learning. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1508–1513, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hisashi Handa. Dimensionality reduction of scene and enemy information in mario. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1514–1519, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Martin Allen and Phil Fritzsche. Reinforcement learning with adaptive kanerva coding for xpilot game ai. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1520–1527, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Gary Parker, William Tarimo, and Michael Cantor. Quadruped gait learning using cyclic genetic algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1528–1533, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- David Hancock and Gary Lamont. Multi agent system for network attack classification using flow-based intrusion detection. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1534–1541, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Riyad Alshammari and A. Nur Zincir-Heywood. Is machine learning losing the battle to produce transportable signatures against voip traffic? In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1542–1549, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Gilberto Reynoso-Meza, Javier Sanchis, Xavier Blasco, and Juan M. Herrero. Hybrid de algorithm with adaptive crossover operator for solving real-world numerical optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1550–1555, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Rammohan Mallipeddi and Nagaratnam Suganthan Ponnuthurai. Ensemble differential evolution algorithm for cec2011 problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1556–1563, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mandal Ankush, Aveek Kumar Das, Prithwijit Mukherjee, Swagatam Das, and P. N. Suganthan. Modified differential evolution with local search algorithm for real world optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1564–1571, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Carlos Echegoyen, Qingfu Zhang, Alexander Mendiburu, Roberto Santana, and Jose Antonio Lozano. On the limits of effectiveness in estimation of distribution algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1572–1579, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Luigi Malago', Matteo Matteucci, and Gabriele Valentini. Introducing 11-regularized logistic regression in markov networks based edas. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1580–1587, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Julio J. Valdes, Catherine Cheung, and Weichao Wang. Evolutionary computation methods for helicopter loads estimation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1588–1595, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Luhan Zhou, Aimin Zhou, Guixu Zhang, and Chuan Shi. An estimation of distribution algorithm based on nonparametric density estimation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1596–1603, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Antonio Lopez-Jaimes, Alfredo Arias-Montano, and Carlos A. Coello Coello. Preference incorporation to solve many-objective airfoil design problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1604–1611, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Paul Walsh and Prasad Gade. The use of an aesthetic measure for the evolution of fractal landscapes. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1612–1618, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mohamad Awad and Kenneth De Jong. Optimization of spectral signature selection using multi-objective genetic algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1619–1626, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Sven Tomforde, Andreas Brameshuber, Joerg Haehner, and Christian Mueller-Schloer. Restricted on-line learning in real-world systems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1627–1634, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Jingxuan Wei and Mengjie Zhang. A memetic particle swarm optimization for constrained multi-objective optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1635–1642, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Wei Chu, Xiaogang Gao, and Soroosh Sorooshian. Fortify particle swam optimizer (pso) with principal components analysis—an example in improving bound-handling for optimizing high-dimensional and complex problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1643—1647, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Cedric Seren. A hybrid jumping particle swarm optimization method for high dimensional unconstrained discrete problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1648–1655, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Christopher Monson. Simple adaptive cognition for pso. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1656–1663, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Ju-Won Hwang, Young-Seol Lee, and Sung-Bae Cho. Structure evolution of dynamic bayesian network for traffic accident detection. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1664–1670, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Myriam Abramson, Ian Will, and Ranjeev Mittu. Hybrid tuning of an evolutionary algorithm for sensor allocation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1671–1677, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Wen-Chyuan Chiang, Gangshu Cai, Xiaojing Xu, Ganesh Mudunuri, and Weihang Zhu. Two-stage tabu particle swarm algorithms for the facility layout problem with size constraints. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1678–1685, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Antonio LaTorre, Santiago Muelas, Jose-Maria Pena, Roberto Santana, and Angel Merchan-Perez. A differential evolution algorithm for the detection of synaptic vesicles. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1686–1693, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Julien Lepagnot, Amir Nakib, Hamouche Oulhadj, and Patrick Siarry. Brain cine mri segmentation based on a multiagent algorithm for dynamic continuous optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1694–1701, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Manuel Abello, Lam Thu Bui, and Zbigniew Michalewicz. An adaptive approach for solving dynamic scheduling with time-varying number of tasks part i. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1702–1709, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Guenter Rudolph. On geometrically fast convergence to optimal dominated hypervolume of set-based multiobjective evolutionary algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1718–1722, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Zhenan He and Gary Yen. An ensemble method for performance metrics in multiobjective evolutionary algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1723–1728, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Prakash Shelokar, Quirin Arnaud, and Cordon Oscar. Subgraph mining in graph-based data using multiobjective evolutionary programming. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1729–1736, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Le Thanh Xuan Yen, Deepak Sharma, Dipti Srinivasan, and Pnidoriya Naran Manji. A modified hybrid particle swarm optimization approach for unit commitment. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1737–1744, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hong Zhang. Assessment of an evolutionary particle swarm optimizer with inertia weight. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1745–1752, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hong Zhang. An analysis of multiple particle swarm optimizers with inertia weight with diversive curiosity. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1753–1760, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Anthony Tjiong and Sildomar Monteiro. Feature selection with pso and kernel methods for hyperspectral classification. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1761–1768, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Chih-Li Huo, Tzu-Ying Lai, and Tsung-Ying Sun. The preliminary study on multi-swarm sharing particle swarm optimization: Applied to uav path planning problem. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1769–1775, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Jie Li, Changwen Zheng, and Xiaohui Hu. A hypervolume based approach for minimal visual coverage shortest path. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1776–1783, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Min-Nan Hsieh, Tsung-Che Chiang, and Li-Chen Fu. A hybrid constraint handling mechanism with differential evolution for constrained multiobjective optimization. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 1784–1791, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yudai Shirasaki, Sho Shimomura, Masaki Sugimoto, Yoko Uwate, and Yoshifumi Nishio. Effectiveness of guidepost pheromone for honeybee colony optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1792–1797, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Zhengmao Ye and Habib Mohamadian. Strengthen accuracy of feature recognition via integration of ant colony detection and adaptive contour tracking. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1798–1803, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Chi nien Lin, Chih-Li Huo, Shu-Yan Lin, Yu-Hsiang Yu, and Tsung-Ying Sun. Taguchi-based disturbance with tournament selection to improve on mopso. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1804–1809, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Takahiro Tsujimoto, Takuya Shindo, and Kenya Jin'no. The neighborhood of canonical deterministic pso. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1810–1816, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yu-Hsuan Huang and Chuan-Kang Ting. Genetic algorithm with path relinking for the multivehicle selective pickup and delivery problem. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1817–1824, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mohamed Khairy, Magda B. Fayek, and Elsayed E. Hemayed. Pso2: Particle swarm optimization with pso-based local search. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1825–1831, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Sheng-Ta Hsieh, Shih-Yuan Chiu, and Shi-Jim Yen. Sharing mutation genetic algorithm for solving multi-objective optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1832–1838, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Nizamul Morshed and Madhu Chetty. Reconstructing genetic networks with concurrent representation of instantaneous and time-delayed interactions. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1839–1846, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mohsen Mousavi, Shaikh Hoque, Shahryar Rahnamayan, Ibrahim Dincer, and Greg F. Naterer. Optimal design of an air-cooling system for a li-ion battery pack in an electric vehicle with a genetic algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1847–1854, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Elhadj Benkhelifa, Ashutosh Tiwari, Alfonso G. De Rueda, and Mansour Moniri. Evolutionary multi-objective design optimisation of energy harvesting mems: The case of a piezoelectric. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1855–1862, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Jingyu Zhang, Shiping Chen, David Levy, and Yongzhong Lu. Feedback loop mechanisms based particle swarm optimization with neighborhood topology. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1863–1870, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Eduardo Mojica-Nava and Nicanor Quijano. A replicator dynamics weighted control technique for a dc-dc converter. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1871–1877, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Edwin Chao Shi, Frank H.F. Leung, and Johnny C.Y. Lai. An adaptive differential evolution with unsymmetrical mutation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1878–1885, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Ping-Lin Chen, Ming-Chin Yang, and Tsung-Ying Sun. Pso-based on-line tuning pid controller for setpoint changes and load disturbance. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1886–1893, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Paulo Parracho, Rui Neves, and Nuno Horta. Trading with optimized uptrend pattern template using a genetic algorithm kernel. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1894–1900, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Rodica Ioana Lung and Dumitru Dumitrescu. A new evolutionary approach to minimax problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1901–1904, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hai lin Liu and Fangqing Gu. A improved nsga-ii algorithm based on sub-regional search. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1905–1910, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Antonino Feitosa Neto, Anne Canuto, Elizabeth Goldbarg, and Marco Goldbarg. Optimization techniques for the selection of members and attributes in ensemble systems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1911–1918, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Pedro Oliveira and Mateus Interciso. Ternary representation improves the search for binary, one-dimensional density classifier cellular automata. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1919–1925, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Luis Scola, Oriane Neto, Ricardo Takahashi, and Sergio Cerqueira. Multi-objective optimal multiple reservoir operation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1926–1932, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Guillermo Leguizamon and Carlos A. Coello Coello. A multi-region differential evolution algorithm for continuos optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1933–1939, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Saurav Ghosh, Subhrajit Roy, Das Swagatam, Abraham Ajith, and Islam Minhazul. Peak-to-average power ratio reduction in ofdm systems using an adaptive differential evolution algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1940–1948, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Minhazul Islam, Saurav Ghosh, Swagatam Das, Ajith Abraham, and Subhrajit Roy. A modified discrete differential evolution based tdma scheduling scheme for many to one communications in wireless sensor networks. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1949–1956, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Victor M. Landassuri-Moreno and John A. Bullinaria. Biasing the evolution of modular neural networks. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1957–1964, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Tatiana Polushina and Georgy Sofronov. Change-point detection in biological sequences via genetic algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1965–1970, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Rammohan Mallipeddi, Giovanni Iacca, Nagaratnam Suganthan Ponnuthurai, Ferrante Neri, and Ernesto Mininno. Ensemble strategies in compact differential evolution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1971–1976, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Jorge Hernandez and Gregorio Toscano-Pulido. A comparison on the search of particle swarm optimization and differential evolution on multi-objective optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1977–1984, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Xiaofen Lu, Ke Tang, and Xin Yao. Classification-assisted differential evolution for computationally expensive problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1985–1992, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Paulo S. Prampero and Romis Attux. Magnetic particle swarm optimization with estimation of distribution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 1993–2000, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Arash Shaban-Nejad and Volker Haarslev. An abstract representation model for evolutionary analysis of multi-agent interactions. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2001–2008, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Garrison Greenwood and Shubham Chopra. A numerical analysis of the evolutionary iterated snowdrift game. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2009–2015, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Antonio Fernandez-Ares, Antonio M. Mora, Juan Julian Merelo, Pablo Garcia-Sanchez, and Carlos Fernandes. Optimizing player behavior in a real-time strategy game using evolutionary algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2016–2023, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Kai Olav Ellefsen. Dynamic robot scheduling using a genetic algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2024–2031, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Carlos Azevedo and Aluizio Araujo. Generalized immigration schemes for dynamic evolutionary multiobjective optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2032–2039, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Marde Helbig and Andries P. Engelbrecht. Archive management for dynamic multi-objective optimisation problems using vector evaluated particle swarm optimisation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2040–2047, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Duncan Coulter and Elizabeth Ehlers. Biologically inspired obsolescence management in mobile agent systems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2048–2055, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Aniesha Alford, Caresse Hansen, Gerry Dozier, Kelvin Bryant, John Kelly, Tamirat Abegaz, Karl Ricanek, and Damon Woodard. Gec-based multi-biometric fusion. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2056–2059, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Douglas Dias, Anderson Singulani, Marco Aurelio Pacheco, Patricia Souza, Mauricio Pires, and Omar Vilela Neto. Self-assembly quantum dots growth prediction by quantum-inspired linear genetic programming. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2060–2067, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Tiril Anette Langfeldt Roedland. Classifying glyphs by combining evolution and learning. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2068–2075, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- James J.Q. Yu, Albert Y.S. Lam, and Victor O.K. Li. Evolutionary artificial neural network based on chemical reaction optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2076–2083, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Kento Uemura, Shun ichi Kinoshita, Yuichi Nagata, Shigenobu Kobayashi, and Isao Ono. A new framework taking account of multi-funnel functions for real-coded genetic algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2084–2091, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Wesam Herbawi and Michael Weber. Comparison of multiobjective evolutionary algorithms for solving the multiobjective route planning in dynamic multi-hop ridesharing. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2092–2099, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mohsen Davarynejad, Jafar Rezaei, Jos Vrancken, Jan van den Berg, and Carlos A. Coello Coello. Accelerating convergence towards the optimal pareto front. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2100–2107, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mario Garza-Fabre, Gregorio Toscano-Pulido, Carlos A. Coello Coello, and Eduardo Rodriguez-Tello. Effective ranking + speciation = many-objective optimization. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 2108–2115, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Amit Saha, Tapabrata Ray, and Warren Smith. Towards practical evolutionary robust multiobjective optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress* on Evolutionary Computation, pages 2116–2123, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Kent McClymont and Ed Keedwell. Benchmark multi-objective optimisation test problems with mixed encodings. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2124–2131, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Alan Lockett and Risto Miikkulainen. Measure-theoretic evolutionary annealing. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2132–2139, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Michael Emmerich, Andre Deutz, and Jan Willem Klinkenberg. Hypervolume-based expected improvement: Monotonicity properties and exact computation. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 2140–2147, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Alan Diaz-Manriquez, Gregorio Toscano-Pulido, and Wilfrido Gomez-Flores. On the selection of surrogate models in evolutionary optimization algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2148–2155, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Jon Spangenberg, Cem Celal Tutum, Jesper Henri Hattel, Nicolas Roussel, and Mette Rica Geiker. Optimization of casting process parameters for homogeneous aggregate distribution in self-compacting concrete: A feasibility study. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2156–2162, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Anupam Trivedi, Naran M.Pindoriya, Dipti Srinivasan, and Deepak Sharma. Improved multiobjective evolutionary algorithm for day-ahead thermal generation scheduling. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2163–2170, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Salomao Madeiro, Edson Galvao, Celso Cavellucci, Christiano Lyra, and Fernando J. Von Zuben. Simultaneous capacitor placement and reconfiguration for loss reduction in distribution networks by a hybrid genetic algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2171–2178, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Huideng Liu and Arui Qiu. Space active noise control system design with multi-objective genetic algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2179–2185, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Babak Amiri, Liaquat Hossain, and John W Crawford. An efficient multiobjective evolutionary algorithm for community detection in social networks. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2186–2192, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Camelia Chira and Anca Gog. Fitness evaluation for overlapping community detection in complex networks. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2193–2199, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Jeffrey Naruchitparames, Mehmet Gunes, and Sushil Louis. Friend recommendations in social networks using genetic algorithms and network topology. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2200–2207, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Tetsuyuki Takahama and Setsuko Sakai. Efficient nonlinear optimization by differential evolution with a rotation-invariant local sampling operation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2208–2215, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Uday Chakraborty, Sajal Das, and Travis Abbott. Clustering in mobile ad hoc networks with differential evolution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2216–2221, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Nasimul Noman, Danushka Bollegala, and Hitoshi Iba. An adaptive differential evolution algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2222–2229, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Salem Adra, Mariam Kiran, Phil McMinn, and Neil Walkinshaw. A multiobjective optimisation approach for the dynamic inference and refinement of agent-based model specifications. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2230–2237, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Abbas Sarraf Shirazi, Sebastian von Mammen, and Christian Jacob. Hierarchical self-organized learning in agent-based modeling of the mapk signaling pathway. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2238–2244, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Belal Al-Khateeb and Graham Kendall. The importance of look-ahead depth in evolutionary checkers. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2245–2251, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Lutao Wang, Shingo Mabu, and Kotaro Hirasawa. Genetic network programming with updating rule accumulation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2252–2259, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- Nata Goulart, Luiz Dias, Sergio Souza, and Thiago Noronha. Biased random-key genetic algorithm for fiber installation in optical network optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2260–2264, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Miguel Rocha, Tiago Sa, Pedro Sousa, Paulo Cortez, and Miguel Rio. Multiobjective evolutionary algorithms for intradomain routing optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2265–2272, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Jing hui Zhong and Jun Zhang. Energy-efficient local wake-up scheduling in wireless sensor networks. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2273–2277, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Adrian Schroeder, Clemens Wrzodek, Johannes Wollnik, Andreas Draeger, Dierk Wanke, Kenneth W. Berendzen, and Andreas Zell. Inferring transcriptional regulators for sets of co-expressed genes by multi-objective evolutionary optimization. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 2278–2285, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Chris Miller, Frank Moore, Brendan Babb, and Michael Peterson. Improved reconstruction of quantized ct scans via genetic algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2286–2292, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Camelia Chira. A hybrid evolutionary approach to protein structure prediction with lattice models. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2293–2299, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mario Garza-Fabre, Eduardo Rodriguez-Tello, and Gregorio Toscano-Pulido. Comparing alternative energy functions for the hp model of protein structure prediction. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2300–2307, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Sameh Kessentini, Dominique Barchiesi, Thomas Grosges, and Marc Lamy de la Chapelle. Particle swarm optimization and evolutionary methods for plasmonic biomedical applications. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2308–2313, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Rodrigo Pasti, Renato Dourado Maia, Fernando J. Von Zuben, and Leandro Nunes de Castro. Heuristics to avoid redundant solutions on population-based multimodal continuous optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2314–2321, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Lam Thu Bui, Hussein Abbass, Stephen Baker, Michael Barlow, and Axel Bender. A grid-based heuristic for two-dimensional packing problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2322–2329, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Jacomine Grobler, Andries P. Engelbrecht, Graham Kendall, and V.S.S. Yadavalli. Investigating the impact of alternative evolutionary selection strategies on multi-method global optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2330–2337, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Azadeh Alimadad, Vahid Dabbaghian, Singh Singh, and Herbert H. Tsang. Modeling hiv spread through sexual contact using a cellular automaton. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2338–2343, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Julien Legriel, Scott Cotton, and Oded Maler. On universal search strategies for multi-criteria optimization using weighted sums. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2344–2351, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Lucas Batista, Felipe Campelo, Frederico Guimaraes, and Jaime Ramirez. A comparison of dominance criteria in many-objective optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2352–2359, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Saul Zapotecas Martinez, Alfredo Arias-Montano, and Carlos A. Coello Coello. A nonlinear simplex search approach for multi-objective optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2360–2367, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Naoki Hamada, Yuichi Nagata, Shigenobu Kobayashi, and Isao Ono. Adaptive weighted aggregation 2: More scalable awa for multiobjective function optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2368–2375, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Fanchao Zeng, Decraene James, Malcolm Yoke Hean Low, Wentong Cai, and Philip Hingston. Studies of pareto-based multi-objective competitive coevolutionary dynamics. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2376–2383, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Rothman, Sean Luke, and Keith Sullivan. Do multiple trials help univariate methods? In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2384–2391, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Ly and Hod Lipson. Trainer selection strategies for coevolving rank predictors. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2392–2399, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Maksud Ibrahimov, Arvind Mohais, Sven Schellenberg, and Zbigniew Michalewicz. Comparison of different evolutionary algorithms for global supply chain optimisation and parameter analysis. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2400–2407, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yun Wen and Hua Xu. A cooperative coevolution-based pittsburgh learning classifier system embedded with memetic feature selection. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2408–2415, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Laurent Dumas, Mohammed El Rhabi, and Gilles Rochefort. An evolutionary approach for blind deconvolution of barcode images with nonuniform illumination. In Alice E. Smith, editor, Proceedings of the 2011 IEEE Congress on Evolutionary Computation, pages 2416–2421, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Mehdi Salmani-Jelodar, Sebastian Steiger, Abhijeet Paul, and Gerhard Klimeck. Model development for lattice properties of gallium arsenide using parallel genetic algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2422–2428, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Mohammad R. Raeesi N. and Ziad Kobti. A machine operation lists based memetic algorithm for job shop scheduling. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2429–2436, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Jan Braun, Johannes Krettek, Frank Hoffmann, and Torsten Bertram. Structure and parameter identification of nonlinear systems with an evolution strategy. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2437–2444, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yu Wang, Li Bin, He Zhen, and Zhang Kaibo. Enhancing differential evolution with effective evolutionary local search in memetic framework. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2445–2452, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hamed Sajjadi Kia and Ababei Cristinel. A new fault-tolerant and congestion-aware adaptive routing algorithm for regular networks-on-chip. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2453–2460, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yafei Xing, Shingo Mabu, and Kotaro Hirasawa. Pruning generalized rules for stock markets accumulated by genetic network programming with rule accumulation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2461–2467, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Yao-Chen Chuang and Chyi-Tsong Chen. A study on real-coded genetic algorithm for process optimization using ranking selection, direction-based crossover and dynamic mutation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2468–2475, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hecheng Li and Yuping Wang. A real-binary coded genetic algorithm for solving nonlinear bilevel programming with nonconvex objective functions. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2476–2480, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Takuya Shindo, Takuya Kurihara, Hiroyuki Taguchi, and Kenya Jin'no. Particle swarm optimization for sigle phase pwm inverters. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2481–2485, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Lee Ki-Baek and Kim Jong-Hwan. Multi-objective particle swarm optimization with preference-based sorting. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2486–2493, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Weicai Zhong, Yang Zhang, and Jing Liu. Evolutionary dynamics of continuous strategy games on social networks under weak selection: A preliminary study. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2494–2498, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Dipti Srinivasan and Trong Trung Ly. Co-evolutionary bidding strategies for buyers in electricity power markets. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2499–2506, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Deepak Sharma, Dipti Srinivasan, and Anupam Trivedi. Multi-agent approach for profit based unit commitment. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2507–2513, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Nobuo Namura, Koji Shimoyama, Shinkyu Jeong, and Shigeru Obayashi. Kriging/rbf-hybrid response surface method for highly nonlinear functions. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2514–2521, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Xin fang Ji, Dun wei Gong, and Xiao ping Ma. Solving optimization problems with intervals and hybrid indices using evolutionary algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2522–2529, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Kazuaki Masuda, Hirofumi Yokota, and Kenzo Kurihara. An empirical study on the search directions of differential evolution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2530–2537, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Fumiya Kudo, Yoshikawa Tomohiro, and Furuhashi Takeshi. A study on analysis of design variables in pareto solutions for conceptual design optimization problem of hybrid rocket engine. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2538–2542, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Zhihui Zhan and Jun Zhang. Orthogonal learning particle swarm optimization for power electronic circuit optimization with free search range. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2543–2550, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Francisco Fernandez de Vega, Francisco Chavez de la O, Rafael Alcala Fernandez, and Francisco Herrera Triguero. Musical genre classification by means of fuzzy rules based systems: A preliminary approach. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2551–2557, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yoshitaka Kameya and Chativit Prayoonsri. Pattern-based preservation of building blocks in genetic algorithms. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2558–2565, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Amir Ahmadi-Javid. Anarchic society optimization: A human-inspired method. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2566–2572, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Khedidja Seridi, Laetitia Jourdan, and El-Ghazali Talbi. Multi-objective evolutionary algorithm for biclustering in microarrays data. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2573–2579, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Zhanghui Chen and Ping Luo. Qisa: Incorporating quantum computation into simulated annealing for optimization problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2580–2587, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Natalia Lima and Teresa Ludermir. Frankenstein pso applied to neural network weights and architectures. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2588–2592, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Remzi Celebi and Hurevren Kilic. Mobile prisoner's dilemma game played on diverse habitats. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2593–2597, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Shuguang Li and Jianping Yuan. The modularity in freeform evolving neural networks. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2598–2603, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Eun-Sol Kim, Jung-Woo Ha, Wi Hoon Jung, Joon Hwan Jang, Jun Soo Kwon, and Zhang Byoung-Tak. Mutual information-based evolution of hypernetworks for brain data analysis. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2604–2610, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Saber Elsayed, Ruhul Sarker, and Daryl Essam. Integrated strategies differential evolution algorithm with a local search for constrained optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2611–2618, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Hui Wang, Shahryar Rahnamayan, and Zhijian Wu. Adaptive differential evolution with variable population size for solving high-dimensional problems. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2619–2625, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Nasimul Noman and Hitoshi Iba. Solving dynamic economic dispatch problems using cellular differential evolution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2626–2633, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Ali Esmailzadeh and Shahryar Rahnamayan. Enhanced differential evolution using center-based sampling. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2634–2641, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Reka Nagy, Dumitru Dumitrescu, and Rodica Ioana Lung. Fuzzy equilibria for games involving n>2 players. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2642–2648, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Ernesto Sanchez, Giovanni Squillero, and Alberto Tonda. Group evolution: Emerging synergy through a coordinated effort. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2649–2655, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Juan Julian Merelo, Antonio M. Mora, and Carlos Cotta. Optimizing worst-case scenario in evolutionary solutions to the mastermind puzzle. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2656–2663, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Anthony Knittel and Terry Bossomaier. Formation and activation of feature hierarchies under reinforcement. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2664–2671, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Ashlock, Justin Schonfeld, and Paul McNicholas. Translation tables: A genetic code in an evolutionary algorithm. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2672–2679, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Joel Lehman and Kenneth Stanley. Improving evolvability through novelty search and self-adaptation. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2680–2687, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Kobus de Bruyn, Geoff Nitschke, and Willem van Heerden. Evolutionary algorithms and particle swarm optimization for artificial language evolution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2688–2695, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Marcio Dorn, Luciana S. Buriol, and Luis C. Lamb. A hybrid genetic algorithm for the 3-d protein structure prediction problem using a path-relinking strategy. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2696–2703, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] In Soo Oh, Yun-Geun Lee, and Robert Ian McKay. Simulating chemical evolution. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2704–2711, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Aniesha Alford, Khary Popplewell, Gerry Dozier, Kelvin Bryant, John Kelly, Joshua Adams, Tamirat Abegaz, Joseph Shelton, Karl Ricanek, and Damon Woodard. A comparison of gecbased feature selection and weighting for multimodal biometric recognition. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2712–2715, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Preethika Kumar, Steven Skinner, and Daraeizadeh Sahar. Nearest-neighbor architecture to overcome the effects of qubit precessions on gate operations. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2716–2721, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Ji-Hoon Lee, Bado Lee, Joon Shik Kim, Russell Deaton, and Byoung-Tak Zhang. A molecular evolutionary algorithm for learning hypernetworks on simulated dna computers. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2722–2729, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Paper not in the database. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Carlos Azevedo and Aluizio Araujo. Correlation between diversity and hypervolume in evolutionary multiobjective optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2730–2737, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Stefan Eppe, Manuel Lopez-Ibanez, Thomas Stuetzle, and Yves De Smet. An experimental study of preference model integration into multi-objective optimization heuristics. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2738–2745, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Emilia Tantar, Alexandru-Adrian Tantar, and Bouvry Pascal. On dynamic multi-objective optimization, classification and performance measures. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2746–2753, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Jian Xiong, Jing Liu, Yingwu Chen, and Hussein Abbass. An evolutionary multi-objective scenario-based approach for stochastic resource investment project scheduling. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2754–2761, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- Daniel Munoz, Carlos Llanos, Leandro Coelho, and Mauricio Ayala. Opposition-based shuffled pso with passive congregation applied to fm matching synthesis. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2762–2768, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.

- [] Sunith Bandaru, Cem Celal Tutum, Kalyanmoy Deb, and Jesper Henri Hattel. Higher-level innovization: A case study from friction stir welding process optimization. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2769–2776, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.
- [] Yoshitaka Sakurai, Kouhei Takada, Natsuki Tsukamoto, Takashi Onoyama, Rainer Knauf, and Setsuo Tsuruta. A simple optimization method based on backtrack and ga for delivery schedule. In Alice E. Smith, editor, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, pages 2777–2784, New Orleans, USA, 5-8 June 2011. IEEE Computational Intelligence Society, IEEE Press.