

Список литературы

- [1] D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*. IEEE Press, 2002.
- [2] A. Meade, D. Corne, and R. Sibly, “Discovering patterns in microsatellite flanks with evolutionary computation by evolving discriminatory dna motifs,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1–6. IEEE Press, 2002.
- [3] S. J. Anastasoff, “The presence of old alus in gc-rich regions of the human genome - a genetic algorithm perspective,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 7–12. IEEE Press, 2002.
- [4] D. Ashlock, A. Wittrock, and T.-J. Wen, “Training finite state machines to improve pcr primer design,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 13–18. IEEE Press, 2002.
- [5] N. Matsumaru, S. Colombano, and K.-P. Zauner, “Scouting enzyme behavior,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 19–24. IEEE Press, 2002.
- [6] G. G. Yen and H. Lu, “Hierarchical rank density genetic algorithm for radial-basis function neural network design,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 25–30. IEEE Press, 2002.
- [7] K. C. Tan, K. Sengupta, T. H. Lee, and R. Sathikannan, “Autonomous registration of disparate spatial data via an evolutionary algorithm toolbox,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 31–36. IEEE Press, 2002.
- [8] R. Thomson and T. Arslan, “An evolutionary algorithm for the multi-objective optimisation of vlsi primitive operator filters,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 37–42. IEEE Press, 2002.
- [9] J. Gan and K. Warwick, “Modelling niches of arbitrary shape in genetic algorithms using niche linkage in the dynamic niche clustering framework,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 43–48. IEEE Press, 2002.
- [10] J. Hu and E. D. Goodman, “The hierarchical fair competition (hfc) model for parallel evolutionary algorithms,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 49–54. IEEE Press, 2002.
- [11] S. Droste, “Analysis of the (1+1) ea for a dynamically changing onemax-variant,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 55–60. IEEE Press, 2002.
- [12] K. Deb, D. Joshi, and A. Anand, “Real-coded evolutionary algorithms with parent-centric recombination,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 61–66. IEEE Press, 2002.

- [13] V. Ciesielski and D. Mawhinney, "Prevention of early convergence in genetic programming by replacement of similar programs," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 67–72. IEEE Press, 2002.
- [14] F. Tanaka, M. Nakatsugawa, M. Yamamoto, T. Shiba, and A. Ohuchi, "Towards a general-purpose sequence design system in dna computing," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 73–78. IEEE Press, 2002.
- [15] S.-Y. Shin, D.-M. Kim, I.-H. Lee, and B.-T. Zhang, "Evolutionary sequence generation for reliable dna computing," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 79–84. IEEE Press, 2002.
- [16] M. Yamamoto, A. Kameda, N. Matsuura, T. Shiba, and A. Ohuchi, "Simulation analysis of hybridization process for dna computing with concentration control," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 85–90. IEEE Press, 2002.
- [17] M. Nakatsugawa, M. Yamamoto, T. Shiba, and A. Ohuchi, "Design of a pcr protocol for improving reliability of pcr in dna computing," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 91–96. IEEE Press, 2002.
- [18] L. Costa and P. Oliveira, "An evolution strategy for multiobjective optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 97–102. IEEE Press, 2002.
- [19] D. J. Caswell and G. B. Lamont, "Wire-antenna geometry design with multiobjective genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 103–108. IEEE Press, 2002.
- [20] K. Socha and M. Kisiel-Dorohinicki, "Agent-based evolutionary multiobjective optimisation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 109–114. IEEE Press, 2002.
- [21] W. Pullan, "Optimising multiple aspects of network survivability," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 115–120. IEEE Press, 2002.
- [22] R. Thomsen, G. B. Fogel, and T. Krink, "A clustal alignment improver using evolutionary algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 121–126. IEEE Press, 2002.
- [23] R. O. Day, J. B. Zydallis, G. Lamont, and R. Pachter, "Analysis of fine granularity and building block sizes in the parallel fast messy ga," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 127–132. IEEE Press, 2002.
- [24] J. J. Rowland and J. Taylor, "Adaptive denoising in spectral analysis by genetic programming," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 133–138. IEEE Press, 2002.

- [25] L. G. Volkert, "Levels of adaptation: Insights into survival in dynamic environments," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 139–144. IEEE Press, 2002.
- [26] C. N. Bendtsen and T. Krink, "Dynamic memory model for non-stationary optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 145–150. IEEE Press, 2002.
- [27] S. D. Mueller, N. N. Schraudolph, and P. D. Koumoutsakos, "Step size adaptation in evolution strategies using reinforcement learning," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 151–156. IEEE Press, 2002.
- [28] J. Wiles and B. Tonkes, "Visualisation of hierarchical cost surfaces for evolutionary computing," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 157–162. IEEE Press, 2002.
- [29] S.-I. Lee and S.-B. Cho, "Measuring evolvability in evolutionary robotics," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 163–168. IEEE Press, 2002.
- [30] K. C. Tsui and J. Liu, "Evolutionary diffusion optimization, part i: Description of the algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 169–174. IEEE Press, 2002.
- [31] A. Madureira, C. Ramos, and S. do Carmo Silva, "A coordination mechanism for real world scheduling problems using genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 175–180. IEEE Press, 2002.
- [32] J. Kacprzyk and G. Szkatula, "An integer programming approach to inductive learning using genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 181–186. IEEE Press, 2002.
- [33] W. H. Land, Jr., M. Bryden, D. W. McKee, J. Y. Lo, and F. R. Anderson, "Performance tradeoff between evolutionary computation (ec)/adaptive boosting (ab) hybrid and support vector machine breast cancer classification paradigms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 187–192. IEEE Press, 2002.
- [34] M. Watts, L. Major, and W. Tate, "Evolutionary optimisation of mlp for modeling protein synthesis termination signal efficiency," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 193–198. IEEE Press, 2002.
- [35] D. Landavazo and G. B. Fogel, "Evolved neural networks for quantitative structure-activity relationships of anti-hiv compounds," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 199–204. IEEE Press, 2002.
- [36] N. Geard, J. Wiles, J. Hallinan, B. Tonkes, and B. Skellett, "A comparison of neutral landscapes - nk, nkp and nkq," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 205–210. IEEE Press, 2002.

- [37] N. Geard and J. Wiles, "Diversity maintenance on neutral landscapes - an argument for recombination," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 211–213. IEEE Press, 2002.
- [38] A. H. Wright, J. E. Rowe, and J. R. Neil, "Analysis of the simple genetic algorithm on the single-peak and double-peak landscapes," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 214–219. IEEE Press, 2002.
- [39] H.-K. Jeong and S.-Y. Oh, "Evolutionary programming integrating 3-generation based mutation and local competition based selection," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 220–224. IEEE Press, 2002.
- [40] F. Lindblad, P. Nordin, and K. Wolff, "Evolving 3D model interpretation of images using graphics hardware," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 225–230. IEEE Press, 2002.
- [41] I. De Falco, A. D. Cioppa, and E. Tarantino, "Unsupervised spectral pattern recognition for multispectral images by means of a genetic programming approach," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 231–236. IEEE Press, 2002.
- [42] T. Yuizono, Y. Wang, K. Satoh, and S. Nakayama, "Study on individual recognition for ear images by using genetic local search," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 237–242. IEEE Press, 2002.
- [43] A. Song, V. Ciesielski, and H. Williams, "Texture classifiers generated by genetic programming," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 243–248. IEEE Press, 2002.
- [44] M. Clergue and P. Collard, "Ga-hard functions built by combination of trap functions," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 249–254. IEEE Press, 2002.
- [45] T. Mahnig and H. Muehlenbein, "A comparison of stochastic local search and population based search," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 255–260. IEEE Press, 2002.
- [46] N. G. Kim, J. M. Won, J. S. Lee, and S. W. Kim, "Local convergence rate of evolutionary algorithm with combined mutation operator," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 261–266. IEEE Press, 2002.
- [47] M. Iwashita and H. Iba, "Island model gp with immigrants aging and depth-dependent crossover," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 267–272. IEEE Press, 2002.
- [48] J. M. Daida, "Limits to expression in genetic programming: Lattice-aggregate modeling," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 273–278. IEEE Press, 2002.

- [49] T. P. Runarsson and X. Yao, "Continuous selection and self-adaptive evolution strategies," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 279–284. IEEE Press, 2002.
- [50] M. Yasunaga, K. Ushiyama, H. Fujiwara, I. Yoshihara, J. H. Kim, and N. Aibe, "An evolutionary kernel-based reasoning system using reconfigurable vlsis: Its hardware prototyping and application to the splicing boundary problem," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 285–290. IEEE Press, 2002.
- [51] S. Ando, H. Iba, and E. Sakamoto, "Modeling genetic network by hybrid gp," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 291–296. IEEE Press, 2002.
- [52] J. Liu and H. Iba, "Selecting informative genes using a multiobjective evolutionary algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 297–302. IEEE Press, 2002.
- [53] I. Ono, H. Fujiki, M. Ootsuka, N. Nakashima, N. Ono, and S. Tate, "Global optimization of protein 3-dimensional structures in nmr by a genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 303–308. IEEE Press, 2002.
- [54] H. D. Nguyen, I. Yoshihara, K. Yamamori, and M. Yasunaga, "A parallel hybrid genetic algorithm for multiple protein sequence alignment," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 309–314. IEEE Press, 2002.
- [55] S. Chiba and K. Sugawara, "Estimation of protein function with an evolutionary dictionary," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 315–320. IEEE Press, 2002.
- [56] S. Mabu, K. Hirasawa, J. Hu, and J. Murata, "Online learning of genetic network programming (gnp)," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 321–326. IEEE Press, 2002.
- [57] J. A. Etzel, "'marigolds': an evolutionary algorithm simulation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 327–332. IEEE Press, 2002.
- [58] C. M. Jonker, A. P. G. de Kock, J. Meijer, and B. J. Vermeulen, "Deliberate evolution agents: Comparing reproduction strategies," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 333–338. IEEE Press, 2002.
- [59] F.-S. Hsieh, "Design of evolvable manufacturing processes," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 339–344. IEEE Press, 2002.
- [60] C. Cambier, M. Piron, and A. Cardon, "Self-adaptive systems using a massive multi-agent system," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 345–350. IEEE Press, 2002.

- [61] A. Al-Yamani, S. M. Sait, and H. R. Barada, "Hpts: Heterogeneous parallel tabu search for vlsi placement," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 351–355. IEEE Press, 2002.
- [62] K. G. Khoo and P. N. Suganthan, "Objective function decomposition within genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 356–359. IEEE Press, 2002.
- [63] Y. Sano and H. Kita, "Optimization of noisy fitness functions by means of genetic algorithms using history of search with test of estimation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 360–365. IEEE Press, 2002.
- [64] V. Cutello, E. Mastriani, and F. Pappalardo, "An evolutionary algorithm for the t-constrained variation of minimum hitting set problem," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 366–371. IEEE Press, 2002.
- [65] S. M. Sait, M. R. Minhas, and J. A. Khan, "Performance and low power driven vlsi standard cell placement using tabu search," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 372–377. IEEE Press, 2002.
- [66] S.-K. Oh, C.-Y. Lee, and J.-J. Lee, "A new distributed evolutionary algorithm for optimization in nonstationary environments," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 378–383. IEEE Press, 2002.
- [67] Y.-C. Liang, S. Kulturel-Konak, and A. E. Smith, "Meta heuristics for the orienteering problem," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 384–389. IEEE Press, 2002.
- [68] K. Rasheed, X. Ni, and S. Vattam, "Comparison of methods for developing dynamic reduced models for design optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 390–395. IEEE Press, 2002.
- [69] B. Greer, H. Hakonen, R. Lahdelma, and R. Miikkulainen, "Numerical optimization with neuroevolution," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 396–401. IEEE Press, 2002.
- [70] A. Cincotti, V. Cutello, and M. Pavone, "Graph partitioning with genetic algorithms using odpx," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 402–406. IEEE Press, 2002.
- [71] K. J. Kim and S.-B. Cho, "Evolving speciated checkers players with crowding algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 407–412. IEEE Press, 2002.
- [72] D. Sofge, K. De Jong, and A. Schultz, "A blended population approach to cooperative coevolution for decomposition of complex problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 413–418. IEEE Press, 2002.

- [73] T. Ray, "Constrained robust optimal design using a multiobjective evolutionary algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 419–424. IEEE Press, 2002.
- [74] R. Kumar, P. P. Parida, and M. Gupta, "Topological design of communication networks using multiobjective genetic optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 425–430. IEEE Press, 2002.
- [75] A. Bahuman, K. Rasheed, and B. Bishop, "An evolutionary approach for vlsi standard cell design," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 431–436. IEEE Press, 2002.
- [76] K. sung Hwang and S. bae Cho, "Evolving diverse hardwares using speciated genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 437–442. IEEE Press, 2002.
- [77] C.-C. Hsu, W.-Y. Wang, and C.-Y. Yu, "Genetic algorithms-derived digital integrators and their applications in discretization of continuous systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 443–448. IEEE Press, 2002.
- [78] C. K. Ho, Y. P. Singh, and S. W. Lee, "Enhancement of a genetic algorithm for optical orthogonal code design using simulated annealing," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 449–453. IEEE Press, 2002.
- [79] H. de Garis, "Evolvability limits : A case study concerning the modular evolvable capacities (mecs) of a new neural net model for a second generation brain building machine bm2," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 454–459. IEEE Press, 2002.
- [80] J.-H. Lee and S.-B. Cho, "Analysis of direct manipulation in interactive evolutionary computation on fitness landscape," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 460–465. IEEE Press, 2002.
- [81] R. R. Cazangi and M. Figueiredo, "Simultaneous emergence of conflicting basic behaviors and their coordination in an evolutionary autonomous navigation system," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 466–471. IEEE Press, 2002.
- [82] Y. Takenaka and A. Hashimoto, "Dna computing by competitive hybridization for maximum satisfiability problem," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 472–476. IEEE Press, 2002.
- [83] W. Bin, Z. Yi, L. Shaohui, and S. Zhongzhi, "Csim: A document clustering algorithm based on swarm intelligence," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 477–482. IEEE Press, 2002.
- [84] D. H. Kim, W. pyo Hong, and J. I. Park, "Auto-tuning of reference based pid controller using immune algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 483–488. IEEE Press, 2002.

- [85] B. Al-kazemi and C. K. Mohan, "Multi-phase generalization of the particle swarm optimization algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 489–494. IEEE Press, 2002.
- [86] A. Sutcliffe, W.-C. Chang, and R. Neville, "Optimizing system requirements with evolutionary computation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 495–499. IEEE Press, 2002.
- [87] C. Wang, Y. C. Soh, H. Wang, and H. Wang, "A hierarchical genetic algorithm for path planning in a static environment with obstacles," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 500–505. IEEE Press, 2002.
- [88] C.-F. Tsai, C.-W. Tsai, and C.-P. Chen, "A novel multiple-searching genetic algorithm for multimedia multicast routing," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 506–511. IEEE Press, 2002.
- [89] C. Wen and R. C. Eberhart, "Genetic algorithm for logistics scheduling problem," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 512–516. IEEE Press, 2002.
- [90] D. Dasgupta and A. Stoliartchouk, "Evolving pc system hardware configurations," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 517–522. IEEE Press, 2002.
- [91] I. Watanabe, K. Okada, K. ichi Tokoro, and S. Matsui, "Adaptive multiagent model of electric power market with congestion management," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 523–528. IEEE Press, 2002.
- [92] A. Moroni, F. Von Zuben, J. Manzolli, and A. Mammana, "Capturing human judgment to simulate objective function," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 529–534. IEEE Press, 2002.
- [93] J. C. Hernandez, P. Isasi, and A. Ribagorda, "Easing collision finding in cryptographic primitives with genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 535–539. IEEE Press, 2002.
- [94] B. Kimiaghalam, A. Homaifar, M. Bikdash, and B. Sayyarodsari, "Genetic algorithm based gain scheduling," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 540–545. IEEE Press, 2002.
- [95] Y. Tsujimura, M. Gen, and A. Syarif, "Solving a nonlinear side constrained transportation problem by using spanning tree-based genetic algorithm with fuzzy logic controller," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 546–551. IEEE Press, 2002.
- [96] G. Dozier, "A comparison of adaptive virtual constraint identification strategies for recurrent dynamic constraint satisfaction," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 552–557. IEEE Press, 2002.

- [97] Y. Li and L. Kang, "Analysis of optimal trajectory on evolutionary algorithm and some control strategies," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 558–563. IEEE Press, 2002.
- [98] E. Eberbach, "On expressiveness of evolutionary computation: Is ec algorithmic?" in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 564–569. IEEE Press, 2002.
- [99] K. Willadsen and J. Wiles, "All binary representations are equal: but some are more equal than others," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 570–575. IEEE Press, 2002.
- [100] P. Popela, J. Roupec, P. Osmera, and R. Matousek, "The formal stochastic framework for comparison of genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 576–581. IEEE Press, 2002.
- [101] A. E. Eiben and M. Jelasity, "A critical note on experimental research methodology in ec," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 582–587. IEEE Press, 2002.
- [102] M. Coletti, "A preliminary study of learnable evolution methodology implemented with c4. 5," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 588–593. IEEE Press, 2002.
- [103] S.-Y. Ho, C.-C. Liu, S. Liu, and J.-W. Jou, "Design of an optimal nearest neighbor classifier using an intelligent genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 594–599. IEEE Press, 2002.
- [104] J. Watson and J. Wiles, "The rise and fall of learning: A neural network model of the genetic assimilation of acquired traits," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 600–605. IEEE Press, 2002.
- [105] M. Watts and N. Kasabov, "Evolutionary optimisation of evolving connectionist systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 606–610. IEEE Press, 2002.
- [106] M. A. Guinea, G. Gutierrez, I. Galvan, A. Sanchis, and J. M. Molina, "Generative capacities of grammars codification for evolution of nn architectures," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 611–616. IEEE Press, 2002.
- [107] P. K. Kim, P. Vadakkepat, T.-H. Lee, and X. Peng, "Evolution of control systems for mobile robots," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 617–622. IEEE Press, 2002.
- [108] A. v. E. Conradie, R. Mikkulainen, and C. Aldrich, "Intelligent process control utilising symbiotic memetic neuro-evolution," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 623–628. IEEE Press, 2002.

- [109] S. E. Eklund, "A massively parallel GP engine in VLSI," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 629–633. IEEE Press, 2002.
- [110] S. Y. Chen and Y. F. Li, "Optimum viewpoint planning for model-based robot vision," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 634–639. IEEE Press, 2002.
- [111] K. MORI, S. Nishi, T. Fuchida, and S. Murashima, "Two dimensional resolution improvement of frame images by genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 640–645. IEEE Press, 2002.
- [112] A. Acan, "Reciprocal translocation with adaptive segment length," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 646–651. IEEE Press, 2002.
- [113] Y. Liu and X. Yao, "How to control search step size in fast evolutionary programming," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 652–656. IEEE Press, 2002.
- [114] A. Dukkipati and M. N. Murty, "Selection by parts: 'selection in two episodes' in evolutionary algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 657–662. IEEE Press, 2002.
- [115] T. Murata, H. Nozawa, Y. Tsujimura, M. Gen, and H. Ishibuchi, "Effect of local search on the performance of cellular multi-objective genetic algorithms for designing fuzzy rule-based classification systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 663–668. IEEE Press, 2002.
- [116] V. Hafner and R. Salomon, "Evolving neural controllers for visual navigation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 669–674. IEEE Press, 2002.
- [117] D. H. Kim, "Tuning of 2-dof pid controller by immune algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 675–680. IEEE Press, 2002.
- [118] J.-W. Kim, S. W. Kim, P. Park, and T. J. Park, "On the similarities between binary-coded ga and real-coded ga in wide search space," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 681–686. IEEE Press, 2002.
- [119] M. A. Janssen and D. W. Stow, "An application of immunocomputing to the evolution of rules for ecosystem management," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 687–692. IEEE Press, 2002.
- [120] F. Nino and O. Beltran, "A change detection software agent based on immune mixed selection," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 693–698. IEEE Press, 2002.
- [121] L. N. de Castro and J. Timmis, "An artificial immune network for multimodal function optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 699–704. IEEE Press, 2002.

- [122] F. Gonzalez, D. Dasgupta, and R. Kozma, "Combining negative selection and classification techniques for anomaly detection," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 705–710. IEEE Press, 2002.
- [123] J. Knowles and D. Corne, "On metrics for comparing non-dominated sets," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 711–716. IEEE Press, 2002.
- [124] C. Valenzuela, "A simple evolutionary algorithm for multi-objective optimization (seamo)," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 717–722. IEEE Press, 2002.
- [125] A. Farhang-Mehr and S. Azarm, "Diversity assessment of pareto-optimal solution sets: An entropy approach," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 723–728. IEEE Press, 2002.
- [126] T. Tassier, M. P. Everson, and D. Ostrowski, "Agent-based models as a complement to economic theory: A durable goods example," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 729–734. IEEE Press, 2002.
- [127] M. P. Everson, C. G. E. Mangin, C. Stumpo, J. M. Schwartz, and D. A. Ostrowski, "Evaluating strategies for foreign exchange risk reduction," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 735–740. IEEE Press, 2002.
- [128] D. Ostrowski, T. Tassier, M. P. Everson, and R. G. Reynolds, "Using cultural algorithms to evolve strategies in agent-based models," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 741–746. IEEE Press, 2002.
- [129] G. Schleis and M. Rizki, "Learning from a random player using the reference neuron model," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 747–752. IEEE Press, 2002.
- [130] D. Crutchley and M. Zwolinski, "Using evolutionary and hybrid algorithms for dc operating point analysis of nonlinear circuits," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 753–758. IEEE Press, 2002.
- [131] C. L. Karr, T. A. Zeiler, and R. Mehrotra, "Determining critical gust loads on aircraft structures using an evolutionary algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 759–764. IEEE Press, 2002.
- [132] R. Goto and Y. Sato, "Applicability of genetic algorithms to motion analysis of a moving object," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 765–770. IEEE Press, 2002.
- [133] Z. Stejic, E. M. Iyoda, Y. Takama, and K. Hirota, "Image similarity computation using local similarity patterns generated by genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 771–776. IEEE Press, 2002.

- [134] T. Beielstein and S. Markon, "Threshold selection, hypothesis tests, and doe methods," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 777–782. IEEE Press, 2002.
- [135] M. Hutter, "Fitness uniform selection to preserve genetic diversity," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 783–788. IEEE Press, 2002.
- [136] Y. Liang and K.-S. Leung, "Two-way mutation evolution strategies," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 789–794. IEEE Press, 2002.
- [137] H. Aguirre and K. Tanaka, "Parallel varying mutation genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 795–800. IEEE Press, 2002.
- [138] L. Wenjian, C. Xianbin, and W. Xufa, "An immune genetic algorithm based on immune regulation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 801–806. IEEE Press, 2002.
- [139] S. Cayzer and U. Aickelin, "A recommender system based on the immune network," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 807–812. IEEE Press, 2002.
- [140] D. Bradley and A. Tyrrell, "A hardware immune system for benchmark state machine error detection," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 813–818. IEEE Press, 2002.
- [141] C. A. C. Coello and N. C. Cortes, "A parallel implementation of the artificial immune system to handle constraints in genetic algorithms: Preliminary results," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 819–824. IEEE Press, 2002.
- [142] K. Deb, L. Thiele, M. Laumanns, and E. Zitzler, "Scalable multi-objective optimization test problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 825–830. IEEE Press, 2002.
- [143] H. A. Abbass, "The self-adaptive pareto differential evolution algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 831–836. IEEE Press, 2002.
- [144] Z.-Y. Zhu and K.-S. Leung, "Asynchronous self-adjustable island genetic algorithm for multi-objective optimization problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 837–842. IEEE Press, 2002.
- [145] S. Mostaghim, J. Teich, and A. Tyagi, "Comparison of data structures for storing pareto-sets in moeas," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 843–848. IEEE Press, 2002.
- [146] J. Brewster, R. G. Reynolds, and M. A. Brockmeyer, "Not in my backyard: A simulation of the effects of agent mobility on environmental poisoning," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 849–854. IEEE Press, 2002.

- [147] N. Rychtyckyj and R. G. Reynolds, "Knowledge base maintenance using cultural algorithms: Application to the dlms manufacturing process system at ford motor company," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 855–860. IEEE Press, 2002.
- [148] R. G. Reynolds and A. Lazar, "Simulating the evolution of the archaic states," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 861–866. IEEE Press, 2002.
- [149] S. Goodhall, R. G. Reynolds, and R. Whallon, "Altruism, selfishness, and survival: An agent-based model of sharing behavior," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 867–871. IEEE Press, 2002.
- [150] Y.-C. Lin, K.-S. Hwang, and F.-S. Wang, "Hybrid differential evolution with multiplier updating method for nonlinear constrained optimization problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 872–877. IEEE Press, 2002.
- [151] B. G. W. Craenen and A. E. Eiben, "An experimental comparison of sawing eas for a new class of random binary csps," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 878–883. IEEE Press, 2002.
- [152] S. B. Hamida and M. Schoenauer, "Aschea: New results using adaptive segregational constraint handling," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 884–889. IEEE Press, 2002.
- [153] X. Zou, L. Kang, and Y. Li, "A dynamical evolutionary algorithm for constrained optimization problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 890–895. IEEE Press, 2002.
- [154] A. Kordon, G. Smits, E. Jordaan, and E. Rightor, "Robust soft sensors based on integration of genetic programming, analytical neural networks, and support vector machines," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 896–901. IEEE Press, 2002.
- [155] A. B. J. G.-H. J. M. M. J. B. J. Portillo, "Ocr parameters tuning by means of evolution strategies for aircraft's tail number recognition," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 902–907. IEEE Press, 2002.
- [156] K. C. Tan, T. H. Lee, J. Cai, and Y. H. Chew, "Automating the drug scheduling of cancer chemotherapy via evolutionary computation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 908–913. IEEE Press, 2002.
- [157] T. Hatanaka, K. Uosaki, and M. Koga, "Evolutionary computation approach to wiener model identification," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 914–919. IEEE Press, 2002.
- [158] A. M. Costa, P. A. Vargas, F. J. Von Zuben, and P. M. Franca, "Makespan minimization on parallel processors: An immune-based approach," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 920–925. IEEE Press, 2002.

- [159] A. B. Watkins and L. C. Boggess, "A resource limited artificial immune classifier," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 926–931. IEEE Press, 2002.
- [160] J. J. Cheh, "A heuristic approach to efficient production of detector sets for an artificial immune algorithm-based bankruptcy prediction system," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 932–937. IEEE Press, 2002.
- [161] A. Tarakanov and V. Skormin, "Pattern recognition by immunocomputing," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 938–943. IEEE Press, 2002.
- [162] H. Lu and G. Yen, "Rank-density based multiobjective genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 944–949. IEEE Press, 2002.
- [163] H. Ishibushi, T. Yoshida, and T. Murata, "Selection of initial solutions for local search in multiobjective genetic local search," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 950–955. IEEE Press, 2002.
- [164] M. Farina, "A neural network based generalized response surface multiobjective evolutionary algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 956–961. IEEE Press, 2002.
- [165] B. A. Kadrovach, J. B. Zydallis, and G. B. Lamont, "Use of mendelian pressure in a multi-objective genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 962–967. IEEE Press, 2002.
- [166] M. Shinkai, H. Aguirre, and K. Tanaka, "Mutation strategy improves ga's performance on epistatic problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 968–973. IEEE Press, 2002.
- [167] S. Tsutsui and D. E. Goldberg, "Simplex crossover and linkage identification: Single-stage evolution vs. multi-stage evolution," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 974–979. IEEE Press, 2002.
- [168] D. Thierens, "Adaptive mutation rate control schemes in genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 980–985. IEEE Press, 2002.
- [169] M. Lones and A. Tyrrell, "Crossover and bloat in the functionality model of enzyme genetic programming," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 986–991. IEEE Press, 2002.
- [170] C. N. Bendtsen and T. Krink, "Phone routing using the dynamic memory model," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 992–997. IEEE Press, 2002.

- [171] J. Xu, T. Arslan, and D. W. Qing-Wang, "Gps attitude determination using a genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 998–1002. IEEE Press, 2002.
- [172] Y. Zhang, L. O. Hall, D. B. Goldgof, and S. Sarkar, "A constrained genetic approach for reconstructing young's modulus of elastic objects from boundary displacement measurements," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1003–1008. IEEE Press, 2002.
- [173] N. S. Majumdar and D. Dasgupta, "Determining optimal configuration for turbine generator cooler," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1009–1014. IEEE Press, 2002.
- [174] J. Kim and P. J. Bentley, "Toward an artificial immune system for network intrusion detection: An investigation of dynamic clonal selection," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1015–1020. IEEE Press, 2002.
- [175] R. Michelan and F. J. Von Zuben, "Decentralized control system for autonomous navigation based on an evolved artificial immune network," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1021–1026. IEEE Press, 2002.
- [176] K. P. Anchor, P. D. Williams, G. H. Gunsch, and G. B. Lamont, "The computer defense immune system: Current and future research in intrusion detection," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1027–1032. IEEE Press, 2002.
- [177] S. P. N. Singh, S. M. Thayer, and W. P. Thayer, "A foundation for kilorobotic exploration," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1033–1038. IEEE Press, 2002.
- [178] D. Dasgupta and N. S. Majumdar, "Anomaly detection in multidimensional data using negative selection algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1039–1044. IEEE Press, 2002.
- [179] J. Balthrop, S. Forrest, and M. R. Glickman, "Revisting lisys: Parameters and normal behavior," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1045–1050. IEEE Press, 2002.
- [180] C. A. C. Coello and M. S. Lechuga, "Mopso: A proposal for multiple objective particle swarm optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1051–1056. IEEE Press, 2002.
- [181] A. P. Alves da Silva and P. J. Abrao, "Applications of evolutionary computation in electric power systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1057–1062. IEEE Press, 2002.
- [182] D. M. Falcao, "Genetic algorithms applications in electrical distribution systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1063–1068. IEEE Press, 2002.

- [183] K. Y. Lee and P. S. Mohamed, "A real-coded genetic algorithm involving a hybrid crossover method for power plant control system design," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1069–1074. IEEE Press, 2002.
- [184] I. N. Kassabalidis, M. A. El-Sharkawi, and R. J. M. II, "Border identification for power system security assessment using neural network inversion: An overview," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1075–1079. IEEE Press, 2002.
- [185] V. Miranda and N. Fonseca, "Epso - best-of-two worlds meta-heuristic applied to power system problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1080–1085. IEEE Press, 2002.
- [186] T. E. Revello and R. McCartney, "Generating war game strategies using a genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1086–1091. IEEE Press, 2002.
- [187] S.-Y. Ho, S.-J. Ho, and Z.-B. Huang, "An evolutionary approach for pose determination and interpretation of occluded articulated objects," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1092–1097. IEEE Press, 2002.
- [188] F. Rojas, C. G. Puntonet, I. Rojas, J. Ortega, and A. Prieto, "Genetic algorithm approach to nonlinear blind source separation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1098–1102. IEEE Press, 2002.
- [189] P. Collet, J. Louchet, and E. Lutton, "Issues on the optimisation of evolutionary algorithms code," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1103–1108. IEEE Press, 2002.
- [190] P. Hingston, L. Barone, and L. While, "Evolving crushers," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1109–1114. IEEE Press, 2002.
- [191] D. H. Milone, J. J. Merelo, and H. L. Rufiner, "Evolutionary algorithm for speech segmentation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1115–1120. IEEE Press, 2002.
- [192] Y. Qiao and X. WeiXin, "A network ids with low false positive rate," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1121–1126. IEEE Press, 2002.
- [193] E. J. Hughes, "Multi-objective evolutionary guidance for swarms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1127–1132. IEEE Press, 2002.
- [194] F. Jimenez, A. F. Gomez-Skarmeta, G. Sanchez, and K. Deb, "An evolutionary algorithm for constrained multi-objective optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1133–1138. IEEE Press, 2002.
- [195] K. H. Ang, G. Chong, and Y. Li, "Preliminary statement on the current progress of multi-objective evolutionary algorithm performance measurement," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1139–1144. IEEE Press, 2002.

- [196] N. Madavan, “Multiobjective optimization using a pareto differential evolution approach,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1145–1150. IEEE Press, 2002.
- [197] M. Basseur, F. Seynhaeve, and E. ghazali Talbi, “Design of multi-objective evolutionary algorithms: Application to the flow-shop scheduling problem,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1151–1156. IEEE Press, 2002.
- [198] J. Lohn, W. F. Kraus, and G. L. Haith, “Comparing a coevolutionary genetic algorithm for multiobjective optimization,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1157–1162. IEEE Press, 2002.
- [199] A. K. Seth, “Distinguishing adaptive from non-adaptive evolution using ashby’s law of requisite variety,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1163–1168. IEEE Press, 2002.
- [200] B. A. Julstrom, “A scalable genetic algorithm for the rectilinear steiner problem,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1169–1173. IEEE Press, 2002.
- [201] N. Sadati and S. Kuchakkhani, “Genetic approach to pole placement by static output feedback,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1174–1179. IEEE Press, 2002.
- [202] M. Iwamatsu, “Co-evolutionary global optimization algorithm,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1180–1184. IEEE Press, 2002.
- [203] P. Cowling, G. Kendall, and L. Han, “An investigation of a hyperheuristic genetic algorithm applied to a trainer scheduling problem,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1185–1190. IEEE Press, 2002.
- [204] P. J. Darwen, “Search landscape of a realistic single-machine scheduling task: Peaks with big differences,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1191–1196. IEEE Press, 2002.
- [205] E. K. Burke, P. De Causmaecker, S. Petrovic, and G. V. Berghe, “A multi criteria meta-heuristic approach to nurse rostering,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1197–1202. IEEE Press, 2002.
- [206] J. Li and R. Kwan, “A fuzzy evolutionary approach with taguchi parameter setting for the set covering problem,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1203–1208. IEEE Press, 2002.
- [207] N. Nikolaev, L. M. de Menezes, and H. Iba, “Overfitting avoidance in genetic programming of polynomials,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1209–1214. IEEE Press, 2002.

- [208] M. M. Fischer, “A novel modular product unit neural network for modelling constrained spatial interaction flows,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1215–1220. IEEE Press, 2002.
- [209] T. Endou and Q. Zhao, “Generation of comprehensible decision trees through evolution of training data,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1221–1225. IEEE Press, 2002.
- [210] C. Y. Ishida and A. T. R. Pozo, “Gpsql miner: Sql-grammar genetic programming in data mining,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1226–1231. IEEE Press, 2002.
- [211] M. Minami, A. Tamamura, and T. Asakura, “Machine intelligence of a mobile manipulator to utilize dynamically interfered motion and nonlinear friction,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1232–1237. IEEE Press, 2002.
- [212] I. Sarafis, A. M. S. Zalzal, and P. Trinder, “A genetic rule-based data clustering toolkit,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1238–1243. IEEE Press, 2002.
- [213] E. Avgerinos, A. M. S. Zalzal, and G. Zografos, “Towards evolutionary optimisation for high resolution bathymetry from sidescan sonars,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1244–1249. IEEE Press, 2002.
- [214] T. Burczynski, W. Kus, E. Majchrzak, P. Orantek, and M. Dziewonski, “Evolutionary computation in identification of a tumor,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1250–1254. IEEE Press, 2002.
- [215] F. Cupertino, D. Naso, L. Salvatore, and B. Turchiano, “Design of cascaded controllers for dc drives using evolutionary algorithms,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1255–1260. IEEE Press, 2002.
- [216] M. Chrzanowska-Jeske, G. Greenwood, and B. Wang, “Combining evolution strategies with lagrangian relaxation for constructing nonslicing vlsi floorplans with soft modules,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1261–1266. IEEE Press, 2002.
- [217] R. O. Canham and A. M. Tyrrell, “Evolved fault tolerance in evolvable hardware,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1267–1271. IEEE Press, 2002.
- [218] K. C. Tan, C. M. Chew, K. K. Tan, L. F. Wang, and Y. J. Chen, “Autonomous robot navigation via intrinsic evolution,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1272–1277. IEEE Press, 2002.
- [219] C. Wei, Z. He, Y. Zhang, and W. Pei, “Swarm directions embedded in fast evolutionary programming,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1278–1283. IEEE Press, 2002.

- [220] K. C. Tsui and J. Liu, "Evolutionary diffusion optimization, part ii: Performance assessment," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1284–1289. IEEE Press, 2002.
- [221] H.-K. Tsai, J.-M. Yang, and C.-Y. Kao, "Solving traveling salesman problems by combining global and local search mechanisms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1290–1295. IEEE Press, 2002.
- [222] D. Ashlock, L. Guo, and F. Qiu, "Greedy closure evolutionary algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1296–1301. IEEE Press, 2002.
- [223] K. C. Tan, A. Tay, T. H. Lee, and C. M. Heng, "Mining multiple comprehensible classification rules using genetic programming," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1302–1307. IEEE Press, 2002.
- [224] H. Ghezelayagh and K. Y. Lee, "Intelligent predictive control of a power plant with evolutionary programming optimizer and neuro-fuzzy identifier," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1308–1313. IEEE Press, 2002.
- [225] M. L. Wong, S. Y. Lee, and K. S. Leung, "A hybrid approach to learn bayesian networks using evolutionary programming," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1314–1319. IEEE Press, 2002.
- [226] X. Xu, H. gen He, and D. Hu, "Evolutionary adaptive-critic methods for reinforcement learning," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1320–1325. IEEE Press, 2002.
- [227] N. X. Hoai, R. I. McKay, D. Essam, and R. Chau, "Solving the symbolic regression problem with tree-adjunct grammar guided genetic programming: The comparative results," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1326–1331. IEEE Press, 2002.
- [228] M. Munetomo, "Linkage identification based on epistasis measures to realize efficient genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1332–1337. IEEE Press, 2002.
- [229] S. Das, "Gene spill: An evolutionary algorithm based on bacterial gene exchange," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1338–1342. IEEE Press, 2002.
- [230] K. Yamamoto, T. Yoshikawa, T. Furuhashi, T. Shinogi, and S. Tsuruoka, "Evaluation of search performance of bacterial evolutionary algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1343–1347. IEEE Press, 2002.
- [231] T. Smith, A. Philippides, P. Husbands, and M. O'Shea, "Neutrality and ruggedness in robot landscapes," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1348–1353. IEEE Press, 2002.

- [232] M. Toussaint and C. Igel, "Neutrality: A necessity for self-adaptation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1354–1359. IEEE Press, 2002.
- [233] R. Shipman, M. Shackleton, and M. Ebner, "Issues in designing a neutral genotype-phenotype mapping," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1360–1365. IEEE Press, 2002.
- [234] W. Cyre, "Learning grammars with a modified classifier system," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1366–1371. IEEE Press, 2002.
- [235] R. K. Ursem and T. Krink, "Genetic programming with smooth operators for arithmetic expressions: Diviplication and subditiion," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1372–1377. IEEE Press, 2002.
- [236] S.-Y. H. S.-J. Ho. and T.-K. Chen, "Design of high performance fuzzy controllers using flexible parameterized membership functions and intelligent genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1378–1383. IEEE Press, 2002.
- [237] M. R. Delgado, F. Von Zuben, and F. Gomide, "Coevolutionary design of takagi-sugeno fuzzy systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1384–1389. IEEE Press, 2002.
- [238] R. Santana and H. Muehlenbein, "Blocked stochastic sampling versus estimation of distribution algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1390–1395. IEEE Press, 2002.
- [239] D.-Y. Cho and B.-T. Zhang, "Evolutionary optimization by distribution estimation with mixtures of factor analyzers," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1396–1401. IEEE Press, 2002.
- [240] Y. Katsumata, S. Kurahashi, and T. Terano, "We need multiple solutions for electric equipments configuration in a power plant - applying bayesian optimization algorithm with tabu search," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1402–1407. IEEE Press, 2002.
- [241] J. E. Davis and G. Kendall, "An investigation, using co-evolution, to evolve an awari player," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1408–1413. IEEE Press, 2002.
- [242] R. Subbu and A. C. Sanderson, "Network performance of distributed coevolutionary agents," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1414–1419. IEEE Press, 2002.
- [243] J. Cartlidge and S. Bullock, "Learning lessons from the common cold: How reducing parasite virulence improves coevolutionary optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1420–1425. IEEE Press, 2002.

- [244] D. D. B. van Bragt and J. A. La Poutre, “Co-evolving automata negotiate with a variety of opponents,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1426–1431. IEEE Press, 2002.
- [245] T. Satoh, H. Kuwabara, Masakazu, Kanezashi, and K. Nara, “Artificial life system and its application to multiple-fuel economic load dispatch problem,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1432–1437. IEEE Press, 2002.
- [246] S. Liang, A. N. Zincir-Heywood, and M. I. Heywood, “The effect of routing under local information using a social insect metaphor,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1438–1443. IEEE Press, 2002.
- [247] L. Schoofs and B. Naudts, “Swarm intelligence on the binary constraint satisfaction problem,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1444–1449. IEEE Press, 2002.
- [248] J. Isaacs, R. Watkins, and S. Foo, “Evolving ant colony systems in hardware for random number generation,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1450–1455. IEEE Press, 2002.
- [249] X. Xie, W. Zhang, and Z. Yang, “A dissipative particle swarm optimization,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1456–1461. IEEE Press, 2002.
- [250] T. Blackwell and P. J. Bentley, “Improvised music with swarms,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1462–1467. IEEE Press, 2002.
- [251] J. Lampinen, “A constraint handling approach for the differential evolution algorithm,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1468–1473. IEEE Press, 2002.
- [252] T. Krink, J. S. Vesterstrøm, and J. Riget, “Particle swarm optimisation with spatial particle extension,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1474–1479. IEEE Press, 2002.
- [253] J. H. Koo, T. S. Kim, S. S. Dong, and C. H. Lee, “Development of fpga based adaptive image enhancement filter system using genetic algorithms,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1480–1485. IEEE Press, 2002.
- [254] F. Corno, G. Cumani, M. S. Reorda, and G. Squillero, “Efficient machine-code test-program induction,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1486–1491. IEEE Press, 2002.
- [255] N. Homma, T. Aoki, and T. Higuchi, “Graph-based individual representation for evolutionary synthesis of arithmetic circuits,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1492–1497. IEEE Press, 2002.

- [256] R. Salomon, “The force model: Reducing the complexity by reformulating the problem,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1498–1503. IEEE Press, 2002.
- [257] K. Boonlong, N. Chaiyaratana, and S. Kuntanapreeda, “Using a co-operative co-evolutionary genetic algorithm to solve optimal control problems in a hysteresis system,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1504–1509. IEEE Press, 2002.
- [258] H. Bersini, “And the winner is not the fittest,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1510–1515. IEEE Press, 2002.
- [259] B. Yuan, “Deterministic crowding, recombination and self-similarity,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1516–1521. IEEE Press, 2002.
- [260] Y. Murakami, H. Sato, and A. Namatame, “Realizing unstable social efficiency with mutual learning of meta-rules,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1522–1527. IEEE Press, 2002.
- [261] O. Wittner and B. E. Helvik, “Cross entropy guided ant-like agents finding dependable primary/backup path patterns in networks,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1528–1533. IEEE Press, 2002.
- [262] R. Bjarnason and T. Peterson, “Multi-agent learning via implicit opponent modeling,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1534–1539. IEEE Press, 2002.
- [263] M. Jelasity, M. Preuss, and B. Paechter, “A scalable and robust framework for distributed applications,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1540–1545. IEEE Press, 2002.
- [264] A. Watkins and L. Boggess, “A new classifier based on resource limited artificial immune systems,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1546–1551. IEEE Press, 2002.
- [265] S. Ando and H. Iba, “Ant algorithm for construction of evolutionary tree,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1552–1557. IEEE Press, 2002.
- [266] C. Blum and M. Sampels, “Ant colony optimization for fop shop scheduling: A case study on different pheromone representations,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1558–1563. IEEE Press, 2002.
- [267] M. Schreyer and G. R. Raidl, “Letting ants labeling point features,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1564–1569. IEEE Press, 2002.
- [268] J. S. Vesterstrøm, J. Riget, and T. Krink, “Division of labor in particle swarm optimisation,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1570–1575. IEEE Press, 2002.

- [269] E. C. Laskari, K. E. Parsopoulos, and M. N. Vrahatis, "Particle swarm optimization for minimax problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1576–1581. IEEE Press, 2002.
- [270] E. C. Laskari, K. E. Parsopoulos, and M. N. Vrahatis, "Particle swarm optimization for integer programming," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1582–1587. IEEE Press, 2002.
- [271] M. Løvbjerg and T. Krink, "Extending particle swarm optimisers with self-organized criticality," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1588–1593. IEEE Press, 2002.
- [272] D. Harris and S. Bullock, "Enhancing game theory with coevolutionary simulation models of honest signaling," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1594–1599. IEEE Press, 2002.
- [273] R. P. Wiegand, W. Liles, and K. De Jong, "Analyzing cooperative coevolution with evolutionary game theory," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1600–1605. IEEE Press, 2002.
- [274] T. Ord and A. Blair, "Exploitation and peacekeeping: introducing more sophisticated interactions to the iterated prisoner's dilemma," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1606–1611. IEEE Press, 2002.
- [275] H. Murao, H. Tamaki, and S. Kitamura, "A coevolutionary approach to adapt the genotype-phenotype map in genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1612–1617. IEEE Press, 2002.
- [276] K. Anchor, G. Lamont, and G. Gunsch, "An evolutionary programming approach for detecting novel computer network attacks," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1618–1623. IEEE Press, 2002.
- [277] C.-H. Chu, J. Gu, X. D. Hou, and Q. Gu, "A heuristic ant algorithm for solving qos multicast routing problem," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1630–1635. IEEE Press, 2002.
- [278] C.-F. Tsai, C.-W. Tsai, and C.-C. Tseng, "A new approach for solving large traveling salesman problem," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1636–1641. IEEE Press, 2002.
- [279] J. A. Khan, S. M. Sait, and M. R. Minhas, "Fuzzy biasless simulated evolution for multiobjective vlsi placement," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1642–1647. IEEE Press, 2002.
- [280] H. Lu and G. G. Yen, "Dynamic population size in multiobjective evolutionary algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1648–1653. IEEE Press, 2002.

- [281] H. A. Abbass, N. X. Hoai, and R. I. McKay, "Anttag: A new method to compose computer programs using colonies of ants," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1654–1659. IEEE Press, 2002.
- [282] J. T. Yang, H.-D. Huang, and J.-T. Horng, "Devising a cost effective baseball scheduling by evolutionary algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1660–1665. IEEE Press, 2002.
- [283] X. Hu and R. Eberhart, "Adaptive particle swarm optimization: Detection and response to dynamic systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1666–1670. IEEE Press, 2002.
- [284] J. Kennedy and R. Mendes, "Population structure and particle swarm performance," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1671–1676. IEEE Press, 2002.
- [285] X. Hu and R. Eberhart, "Multiobjective optimization using dynamic neighborhood particle swarm optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1677–1681. IEEE Press, 2002.
- [286] Y. Shi and R. A. Krohling, "Co-evolutionary particle swarm optimization to solve min-max problems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1682–1687. IEEE Press, 2002.
- [287] R. A. Krohling, H. Knidel, and Y. Shi, "Solving numerical equations of hydraulic problems using particle swarm optimization," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1688–1690. IEEE Press, 2002.
- [288] T. Blackwell and P. J. Bentley, "Don't push me! collision-avoiding swarms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1691–1696. IEEE Press, 2002.
- [289] J. Vincent, "A comparison of reproductive success and the effect of mating restrictions in coarse-grained parallel genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1697–1702. IEEE Press, 2002.
- [290] K. S. Leung, K. H. Lee, and S. M. Cheang, "Evolving parallel machine programs for a multi-alu processor," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1703–1708. IEEE Press, 2002.
- [291] X. Li and M. Kirley, "The effects of varying population density in a fine-grained parallel genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1709–1714. IEEE Press, 2002.
- [292] K. Kojima, H. Matsuo, and M. Ishigame, "Reduction of communication quantity for network based parallel ga," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1715–1720. IEEE Press, 2002.

- [293] A. Hamilton-Wright and D. Stacey, "Fault-tolerant network computation of individuals in genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1721–1726. IEEE Press, 2002.
- [294] G. Galeano, F. Fernandez, M. Tomassini, and L. Vanneschi, "Studying the influence of synchronous and asynchronous parallel gp on programs' length evolution," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1727–1732. IEEE Press, 2002.
- [295] J. A. Joines and M. G. Kay, "Hybrid genetic algorithms and random linkage," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1733–1738. IEEE Press, 2002.
- [296] R. Zhang, W. K. King, and Q. Wang, "Applying evolutionary programming to improve branch classification in the hybrid branch prediction method using switch-counter," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1739–1744. IEEE Press, 2002.
- [297] M. Chang, K. Ohkura, K. Ueda, and M. Sugiyama, "A symbiotic evolutionary algorithm for dynamic facility layout problem," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1745–1750. IEEE Press, 2002.
- [298] D. Srinivasan, T. H. Seow, and J. X. Xu, "Automated time table generation using multiple context reasoning for university modules," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1751–1756. IEEE Press, 2002.
- [299] K. O. Stanley and R. Miikkulainen, "Efficient evolution of neural network topologies," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1757–1762. IEEE Press, 2002.
- [300] Y. Wang and Y. Lu, "The fast neural network solution for problems based on slow genetic algorithm solutions," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1763–1768. IEEE Press, 2002.
- [301] D. C. Edwards, K. E. Brown, and N. K. Taylor, "An evolutionary method for the design of generic neural networks," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1769–1774. IEEE Press, 2002.
- [302] D. Weingaertner, V. K. Tatai, R. R. Gudwin, and F. J. V. Zuben, "Hierarchical evolution of heterogeneous neural networks," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1775–1780. IEEE Press, 2002.
- [303] T. Kovacs, "Performance and population state metrics for rule-based learning systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1781–1786. IEEE Press, 2002.
- [304] A. Aizawa, "A co-evolutionary framework for clustering in information retrieval systems," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1787–1792. IEEE Press, 2002.

- [305] C.-Y. Lee and E. K. Antonsson, "Reinforcement learning in steady-state cellular genetic algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1793–1797. IEEE Press, 2002.
- [306] L. M. Hercog and T. C. Fogarty, "Co-evolutionary classifier systems for multi-agent simulation," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1798–1803. IEEE Press, 2002.
- [307] Y. Y. Wai, C. K. Chow, and T. Lee, "Resolving ambiguity in depth extraction for motion capture using genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1804–1809. IEEE Press, 2002.
- [308] M. J. Kaiser, K. C. Tsui, and J. Liu, "Adaptive distributed caching," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1810–1815. IEEE Press, 2002.
- [309] S. Chavali, A. Pahwa, and S. Das, "A genetic algorithm approach for optimal distribution feeder restoration during cold load pickup," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1816–1819. IEEE Press, 2002.
- [310] I. E. Golovkin, S. J. Louis, and R. C. Mancini, "Parallel implementation of niched pareto genetic algorithm code for x-ray plasma spectroscopy," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1820–1824. IEEE Press, 2002.
- [311] B. Aktan, G. Greenwood, and M. Shor, "Improving evolutionary algorithm performance on maximizing functional test coverage of asics using adaptation of the fitness criteria," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1825–1829. IEEE Press, 2002.
- [312] A. Stoica, R. Zebulum, D. Keymeulen, M. I. Ferguson, and V. Duong, "Fuzzy controller implementations with fewer than ten transistors?" in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1830–1835. IEEE Press, 2002.
- [313] J. Bird and P. Layzell, "The evolved radio and its implications for modelling the evolution of novel sensors," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1836–1841. IEEE Press, 2002.
- [314] R. H. Mazza, III and C. B. Congdon, "Towards a genetic algorithms approach to designing 3D polygonal tree models," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1842–1847. IEEE Press, 2002.
- [315] Y. Matsumura, K. Ohkura, and K. Ueda, "Advantages of global discrete recombination in (μ , λ) evolution strategies," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1848–1853. IEEE Press, 2002.
- [316] O. Monakhov and E. Monakhova, "Using evolutionary algorithm for generation of dense families of circulant networks," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1854–1859. IEEE Press, 2002.

- [317] J.-X. Xu, S. K. Panda, and Q. Zheng, "Multiobjective optimization of current waveforms for switched reluctance motors by genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1860–1865. IEEE Press, 2002.
- [318] X. Wu, C.-H. Chu, Y. Wang, and W. Yan, "A genetic algorithm for integrated cell formation and layout decision," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1866–1871. IEEE Press, 2002.
- [319] J. C. Bongard, "Evolving modular genetic regulatory networks," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1872–1877. IEEE Press, 2002.
- [320] P. R. W. Harvey, D. M. Booth, and J. F. Boyce, "Evolving the mapping between input neurons and multi-source imagery," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1878–1883. IEEE Press, 2002.
- [321] B. Verma and R. Ghosh, "A novel evolutionary neural learning algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1884–1889. IEEE Press, 2002.
- [322] X. Fu and L. Wang, "A GA-based novel RBF classifier with class-dependent features," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1890–1894. IEEE Press, 2002.
- [323] G. G. Yen and N. Nithianandan, "Facial feature extraction using genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1895–1900. IEEE Press, 2002.
- [324] B. Blaha and D. Wunsch, "Evolutionary programming to optimize an assembly program," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1901–1903. IEEE Press, 2002.
- [325] T. Beielstein, J. Dienstuhl, C. Feist, and M. Pompl, "Circuit design using evolutionary algorithms," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1904–1909. IEEE Press, 2002.
- [326] R. Hoar, J. Penner, and C. Jacob, "Evolutionary swarm traffic: If ant roads had traffic lights," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1910–1915. IEEE Press, 2002.
- [327] X. Fu and L. Wang, "Rule extraction from an rbf classifier based on class-dependent features," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1916–1921. IEEE Press, 2002.
- [328] P. Mordaunt and A. Zalzal, "Towards an evolutionary neural network for gait analysis," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1922–1927. IEEE Press, 2002.

- [329] S. H. Ling, H. K. Lam, F. H. F. Leung, and P. K. S. Tam, "Learning of neural network parameters using a fuzzy genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1928–1933. IEEE Press, 2002.
- [330] O. Ciftcioglu, "GA with orthogonal transformation for RBFN configuration," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1934–1939. IEEE Press, 2002.
- [331] K.-H. Lee, C.-H. Lee, J.-H. Kim, H.-L. Choi, and M.-J. Tahk, "Evolutionary optimized pitching motion control for f-16 aircraft," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1940–1945. IEEE Press, 2002.
- [332] C. K. Chan, H. B. Gooi, and M. H. Lim, "A co-evolutionary algorithm approach to a university timetable system," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1946–1951. IEEE Press, 2002.
- [333] S. Lucas, "Evolving spring-mass models: a test-bed for graph encoding schemes," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1952–1957. IEEE Press, 2002.
- [334] R. Torres-Velazquez and V. Estivill-Castro, "A memetic algorithm instantiated with selection sort consistently finds global optima for the error-correcting graph isomorphism," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1958–1963. IEEE Press, 2002.
- [335] S.-J. Kim, J.-S. Kim, J.-Y. Seo, H.-C. Cho, and H.-T. Jeon, "Optimal initial structure of the rbf networks using time-frequency localization and genetic algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1964–1969. IEEE Press, 2002.
- [336] E. Tuci, M. Quinn, and I. Harvey, "Evolving fixed-weight networks for learning robots," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1970–1975. IEEE Press, 2002.
- [337] S. Oeda, T. Ichimura, and T. Yamashita, "Biological immune system by evolutionary adaptive learning of neural networks," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1976–1981. IEEE Press, 2002.
- [338] Y. Ding and L. Ren, "A new dna-based evolutionary algorithm with application to the design of fuzzy controllers," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1982–1987. IEEE Press, 2002.
- [339] D. Taylor, D. Corne, D. Taylor, and J. Harkness, "Predicting alarms in supermarket refrigeration systems using evolved neural networks and evolved rulesets," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1988–1993. IEEE Press, 2002.
- [340] L. Xin, P. Vadakkepat, T. H. Lee, X. Peng, and P. K. Kim, "Comparison of robot navigation by evolutionary neural networks and pain-based algorithm," in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 1994–1999. IEEE Press, 2002.

- [341] R. K. H. Galvao, V. M. Becerra, and M. Abou-Seada, “Variable selection for financial distress classification using a genetic algorithm,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 2000–2005. IEEE Press, 2002.
- [342] N. Svangard, S. Lloyd, P. Nordin, and C. Wihlborg, “Evolving short-term trading strategies using genetic programming,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 2006–2010. IEEE Press, 2002.
- [343] T. Hamada, H. Kawamura, M. Yamamoto, and A. Ohuchi, “A study on behavioral structure of artificial market based on adaptive game,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 2011–2016. IEEE Press, 2002.
- [344] K. Yamasaki, K. Kitakaze, and M. Sekiguchi, “Dynamic optimization by evolutionary algorithms applied to financial time series,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 2017–2022. IEEE Press, 2002.
- [345] T. Minerva and S. Paterlini, “Evolutionary approaches for statistical modelling,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 2023–2028. IEEE Press, 2002.
- [346] D. Cliff, “Evolution of market mechanism through a continuous space of auction-types,” in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, eds., pp. 2029–2034. IEEE Press, 2002.