Список литературы

[Wu(1999)] A. S. Wu, Ed., Orlando, Florida, USA, 13 July 1999. [Online]. Available: http://www.aic.nrl.navy.mil:80/~aswu/gecco99

[Kubota and Fukuda(1999)] N. Kubota and T. Fukuda, "Hierarchical coding in coevolutionary algorithms," in *Coevolutionary Algorithms and Coevolving Agents*, C. G. Johnson, B. Olsson, and S. Romaniuk, Eds., Orlando, Florida, USA, 13 July 1999, pp. 2–4.

[Romaniuk(1999)] S. G. Romaniuk, "From agent collaboration and communication to speciation and simplified software design," in *Coevolutionary Algorithms and Coevolving Agents*, C. G. Johnson, B. Olsson, and S. Romaniuk, Eds., Orlando, Florida, USA, 13 July 1999, pp. 5–7.

[Sen et al.(1999a)Sen, Biswas, Debnath, and Puppala] S. Sen, A. Biswas, S. Debnath, and N. Puppala, "Cooperative coevolution using shared memory," in *Coevolutionary Algorithms and Coevolving Agents*, C. G. Johnson, B. Olsson, and S. Romaniuk, Eds., Orlando, Florida, USA, 13 July 1999, pp. 8–11.

[Sen et al.(1999b)Sen, Mundhe, and Debnath] S. Sen, M. Mundhe, and S. Debnath, "Evolving agent societies that avoid social dilemmas," in *Coevolutionary Algorithms and Coevolving Agents*, C. G. Johnson, B. Olsson, and S. Romaniuk, Eds., Orlando, Florida, USA, 13 July 1999, pp. 12–14.

[Maley(1999)] C. C. Maley, "Methodologies in the use of computational models for theoretical biology," in *Computational Models in Theoretical Biology*, C. C. Maley, Ed., Orlando, Florida, USA, 13 July 1999, pp. 16–19.

[Bedau(1999a)] M. A. Bedau, "Can unrealistic computer models illuminate theoretical biology?" in *Computational Models in Theoretical Biology*, C. C. Maley, Ed., Orlando, Florida, USA, 13 July 1999, pp. 20–23.

[Wu et al.(1999a)Wu, Ramsey, Burke, De Jong, and Grefenstette] A. S. Wu, C. L. Ramsey, D. S. Burke, K. A. De Jong, and J. J. Grefenstette, "An evolutionary computation model for studying viral evolution," in *Computational Models in Theoretical Biology*, C. C. Maley, Ed., Orlando, Florida, USA, 13 July 1999, pp. 24–28.

[Marrow(1999)] P. Marrow, "Evolvability: Evolvability, computation, biology," in *Evolvability*, P. Marrow, M. Shackleton, J.-L. Fernandez-Villacanas, and T. Ray, Eds., Orlando, Florida, USA, 13 July 1999, pp. 30–33.

[Bedau(1999b)] M. A. Bedau, "Quantifying the extent and intensity of adaptive evolution," in *Evolvability*, P. Marrow, M. Shackleton, J.-L. Fernandez-Villacanas, and T. Ray, Eds., Orlando, Florida, USA, 13 July 1999, pp. 34–37.

[Glickman and Sycara(1999)] M. Glickman and K. Sycara, "Comparing mechanisms for evolving evolvability," in *Evolvability*, P. Marrow, M. Shackleton, J.-L. Fernandez-Villacanas, and T. Ray, Eds., Orlando, Florida, USA, 13 July 1999, pp. 38–41.

[Ofria(1999)] C. Ofria, "Robustness and evolvability of programming languages," in *Evolvability*, P. Marrow, M. Shackleton, J.-L. Fernandez-Villacanas, and T. Ray, Eds., Orlando, Florida, USA, 13 July 1999, p. 42.

[Turney(1999)] P. D. Turney, "Increasing evolvability considered as a large scale trend in evolution," in *Evolvability*, P. Marrow, M. Shackleton, J.-L. Fernandez-Villacanas, and T. Ray, Eds., Orlando, Florida, USA, 13 July 1999, pp. 43–46.

[Wagner(1999)] G. P. Wagner, "The quantitative genetic theory of evolvability," in *Evolvability*, P. Marrow, M. Shackleton, J.-L. Fernandez-Villacanas, and T. Ray, Eds., Orlando, Florida, USA, 13 July 1999, pp. 47–50.

[Haynes et al.(1999)Haynes, Langdon, O'Reilly, Poli, and Rosca] T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, "Foundations of genetic programming: Preface," in *Foundations of Genetic Programming*, T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, Eds., Orlando, Florida, USA, 13 July 1999, p. 52.

[Daida(1999a)] J. M. Daida, "Reconnoiter by candle: Identifying assumptions in genetic programming," in *Foundations of Genetic Programming*, T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, Eds., Orlando, Florida, USA, 13 July 1999, pp. 53–54.

[Langdon(1999)] W. B. Langdon, "Linear increase in tree height leads to sub-quadratic bloat," in *Foundations of Genetic Programming*, T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, Eds., Orlando, Florida, USA, 13 July 1999, pp. 55–56.

[Nordin et al.(1999)Nordin, Banzhaf, and Francone] P. Nordin, W. Banzhaf, and F. D. Francone, "Compression of effective size in genetic programming," in *Foundations of Genetic Programming*, T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, Eds., Orlando, Florida, USA, 13 July 1999, pp. 57–60.

[Poli(1999)] R. Poli, "Schema theory without expectations for gp and gas with one-point crossover in the presence of schema creation," in *Foundations of Genetic Programming*, T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, Eds., Orlando, Florida, USA, 13 July 1999, pp. 61–63.

[Rosca(1999)] J. Rosca, "Genetic programming acquires solutions by combining top-down and bottom-up refinement," in *Foundations of Genetic Programming*, T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, Eds., Orlando, Florida, USA, 13 July 1999, pp. 64–65.

[Yao(1999)] X. Yao, "Universal approximation by genetic programming," in *Foundations of Genetic Programming*, T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, Eds., Orlando, Florida, USA, 13 July 1999, pp. 66–67.

[Zhang(1999a)] B.-T. Zhang, "Bayesian genetic programming," in *Foundations of Genetic Programming*, T. Haynes, W. B. Langdon, U.-M. O'Reilly, R. Poli, and J. Rosca, Eds., Orlando, Florida, USA, 13 July 1999, pp. 68–70.

[Hussain(1999)] T. S. Hussain, "Workshop on advanced grammar techniques within genetic programming and evolutionary computation," in *Advanced Grammar Techniques Within Genetic Programming and Evolutionary Computation*, T. S. Hussain, Ed., Orlando, Florida, USA, 13 July 1999, p. 72.

[Rose(1999)] B. J. Rose, "Logic-based genetic programming with definite clause translation grammars," in *Advanced Grammar Techniques Within Genetic Programming and Evolutionary Computation*, T. S. Hussain, Ed., Orlando, Florida, USA, 13 July 1999, pp. 73–75.

[Jacob(1999)] C. Jacob, "Lindenmayer systems and growth program evolution," in *Advanced Grammar Techniques Within Genetic Programming and Evolutionary Computation*, T. S. Hussain, Ed., Orlando, Florida, USA, 13 July 1999, pp. 76–79.

[Janikow(1999)] C. Z. Janikow, "Constrained genetic programming," in *Advanced Grammar Techniques Within Genetic Programming and Evolutionary Computation*, T. S. Hussain, Ed., Orlando, Florida, USA, 13 July 1999, pp. 80–82.

[Hussain and Browse(1999)] T. S. Hussain and R. A. Browse, "Genetic operators with dynamic biases that operate on attribute grammar representations of neural networks," in *Advanced Grammar Techniques Within Genetic Programming and Evolutionary Computation*, T. S. Hussain, Ed., Orlando, Florida, USA, 13 July 1999, pp. 83–86.

[Daida(1999b)] J. M. Daida, "The methodology, pedagogy, and philosophy of genetic and evolutionary computation: Reporting and research practices," in *The Methodology, Pedagogy, and Philosophy of Genetic and Evolutionary Computation*, J. M. Daida, Ed., Orlando, Florida, USA, 13 July 1999, pp. 88–92.

[Collins(1999a)] T. D. Collins, "Evolutionary computation visualization," in *Evolutionary Computation Visualization*, T. D. Collins, Ed., Orlando, Florida, USA, 13 July 1999, pp. 94–95.

[Bedau et al.(1999)Bedau, Joshi, and Lillie] M. A. Bedau, S. Joshi, and B. Lillie, "Visualizing waves of evolutionary activity of alleles," in *Evolutionary Computation Visualization*, T. D. Collins, Ed., Orlando, Florida, USA, 13 July 1999, pp. 96–98.

[Collins(1999b)] J. J. Collins, "Visualization of evolutionary algorithms using principal components analysis," in *Evolutionary Computation Visualization*, T. D. Collins, Ed., Orlando, Florida, USA, 13 July 1999, pp. 99–100.

[Pohlheim(1999)] H. Pohlheim, "Visualization of evolutionary algorithms: Real-world application of standard techniques and multidimensional visualization," in *Evolutionary Computation Visualization*, T. D. Collins, Ed., Orlando, Florida, USA, 13 July 1999, pp. 101–103.

[Spears(1999)] W. M. Spears, "An overview of multidimensional visualization techniques," in *Evolutionary Computation Visualization*, T. D. Collins, Ed., Orlando, Florida, USA, 13 July 1999, pp. 104–105.

[Wu et al.(1999b)Wu, Ramsey, De Jong, Grefenstette, and Burke] A. S. Wu, C. L. Ramsey, K. A. De Jong, J. J. Grefenstette, and D. S. Burke, "Vis: A genetic algorithm visualization tool," in *Evolutionary Computation Visualization*, T. D. Collins, Ed., Orlando, Florida, USA, 13 July 1999, pp. 106–109.

[Deb(1999)] K. Deb, "Organizer's comments," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 111–112.

[Veldhuizen and Lamont(1999a)] D. A. V. Veldhuizen and G. B. Lamont, "Moea test suite generation, design, and use," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 113–114.

[Jimenez et al.(1999)Jimenez, Verdegay, and Gomez-Skarmeta] F. Jimenez, J. L. Verdegay, and A. F. Gomez-Skarmeta, "Evolutionary techniques for constrained multiobjective optimization problems," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 115–116.

[Coello(1999)] C. A. C. Coello, "Constraint handling through a multiobjective optimization technique," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 117–118.

[Shaw et al.(1999)Shaw, Fonseca, and Fleming] K. J. Shaw, C. M. Fonseca, and P. J. Fleming, "A simple demonstration of a quantitative technique for comparing multiobjective genetic algorithm performance," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 119–120.

[Zitzler et al.(1999)Zitzler, Deb, and Thiele] E. Zitzler, K. Deb, and L. Thiele, "Comparison of multiobjective evolutionary algorithms on test functions of different difficulty," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 121–122.

[Knowles and Corne(1999)] J. Knowles and D. Corne, "Assessing the performance of the pareto archived evolution strategy," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 123–124.

[Veldhuizen and Lamont(1999b)] D. A. V. Veldhuizen and G. B. Lamont, "Genetic algorithms, building blocks, and multiobjective optimization," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 125–126.

[Binh(1999)] T. T. Binh, "A multiobjective evolutionary algorithm: The study cases," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 127–128.

[Cunha et al.(1999)Cunha, Oliveira, and Covas] A. G. Cunha, P. Oliveira, and J. A. Covas, "Genetic algorithms in multiobjective optimization problems: An application to polymer extrusion," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 129–130.

[Herreros et al.(1999)Herreros, Baeyens, and Peran] A. Herreros, E. Baeyens, and J. R. Peran, "Design of multiobjective robust controllers using genetic algorithms," in *Multi-criterion Optimization Using Evolutionary Methods*, K. Deb, Ed., Orlando, Florida, USA, 13 July 1999, pp. 131–132.

[Branke(1999)] J. Branke, "Evolutionary approaches to dynamic optimization problems - a survey," in *Evolutionary Algorithms for Dynamic Optimization Problems*, J. Branke and T. Baeck, Eds., Orlando, Florida, USA, 13 July 1999, pp. 134–137.

[Mattfeld and Bierwirth(1999)] D. C. Mattfeld and C. Bierwirth, "Adaptation and dynamic optimization problems: A view from general system theory," in *Evolutionary Algorithms for Dynamic Optimization Problems*, J. Branke and T. Baeck, Eds., Orlando, Florida, USA, 13 July 1999, pp. 138–141.

[Baeck(1999)] T. Baeck, "Self-adaptive genetic algorithms for dynamic environments with slow dynamics," in *Evolutionary Algorithms for Dynamic Optimization Problems*, J. Branke and T. Baeck, Eds., Orlando, Florida, USA, 13 July 1999, pp. 142–145.

[Karr(1999)] C. L. Karr, "An architecture for adaptive process control systems," in *Evolutionary Algorithms for Dynamic Optimization Problems*, J. Branke and T. Baeck, Eds., Orlando, Florida, USA, 13 July 1999, pp. 146–148.

[Santana et al.(1999)Santana, Ochoa, and Soto] R. Santana, A. Ochoa, and M. R. Soto, "Evolutionary algorithms for dynamic optimization problems: An approach using evolutionary theory and the incident edge model," in *Evolutionary Algorithms for Dynamic Optimization Problems*, J. Branke and T. Baeck, Eds., Orlando, Florida, USA, 13 July 1999, pp. 149–152.

[Anbarasu et al.(1999)Anbarasu, Narayanasamy, and Sundararajan] L. A. Anbarasu, P. Narayanasamy, and V. Sundararajan, "Multiple sequence alignment by parallely evolvable genetic algorithms," in *Evolutionary Computation and Parallel Processing*, E. Cantu-Paz and B. Punch, Eds., Orlando, Florida, USA, 13 July 1999, pp. 154–156.

[Bradwell and Brown(1999)] R. Bradwell and K. Brown, "Parallel asynchronous memetic algorithms," in *Evolutionary Computation and Parallel Processing*, E. Cantu-Paz and B. Punch, Eds., Orlando, Florida, USA, 13 July 1999, pp. 157–159.

[Braud and Vrain(1999)] A. Braud and C. Vrain, "A parallel genetic algorithm based on the bsp model," in *Evolutionary Computation and Parallel Processing*, E. Cantu-Paz and B. Punch, Eds., Orlando, Florida, USA, 13 July 1999, pp. 160–162.

[Chong(1999)] F. S. Chong, "Java based distributed genetic programming on the internet," in *Evolutionary Computation and Parallel Processing*, E. Cantu-Paz and B. Punch, Eds., Orlando, Florida, USA, 13 July 1999, pp. 163–166.

[Davison and Rasheed(1999)] B. D. Davison and K. Rasheed, "Effect of global parallelism on a steady state ga," in *Evolutionary Computation and Parallel Processing*, E. Cantu-Paz and B. Punch, Eds., Orlando, Florida, USA, 13 July 1999, pp. 167–170.

[He and Mort(1999)] L. He and N. Mort, "Application of parallel genetic algorithms to combinatorial multimodal optimization problems," in *Evolutionary Computation and Parallel Processing*, E. Cantu-Paz and B. Punch, Eds., Orlando, Florida, USA, 13 July 1999, pp. 171–173.

[Pohlheim et al.(1999)Pohlheim, Pawletta, and Westphal] H. Pohlheim, S. Pawletta, and A. Westphal, "Parallel evolutionary optimization under matlab on standard computing networks," in *Evolutionary Computation and Parallel Processing*, E. Cantu-Paz and B. Punch, Eds., Orlando, Florida, USA, 13 July 1999, pp. 174–176.

[Polani et al.(1999)Polani, Uthmann, and Dautenhahn] D. Polani, T. Uthmann, and K. Dautenhahn, "Gecco birds-of-a-feather workshop on evolution of sensors in nature, hardware, and simulation," in *Evolution of Sensors in Nature, Hardware, and Simulation*, D. Polani, T. Uthmann, and K. Dautenhahn, Eds., Orlando, Florida, USA, 13 July 1999, p. 178.

[Love and Johnson(1999)] J. E. Love and K. M. Johnson, "Evolving natural and artificial gravisensory systems," in *Evolution of Sensors in Nature, Hardware, and Simulation*, D. Polani, T. Uthmann, and K. Dautenhahn, Eds., Orlando, Florida, USA, 13 July 1999, pp. 179–183.

[Mautner(1999)] C. Mautner, "Exploring sensor usage in simulated evolutionary robotics," in *Evolution of Sensors in Nature, Hardware, and Simulation*, D. Polani, T. Uthmann, and K. Dautenhahn, Eds., Orlando, Florida, USA, 13 July 1999, pp. 184–185.

[Alissandrakis and Dautenhahn(1999)] A. Alissandrakis and K. Dautenhahn, "Evolution of vision-based agent behavior in hilly landscapes," in *Evolution of Sensors in Nature, Hardware, and Simulation*, D. Polani, T. Uthmann, and K. Dautenhahn, Eds., Orlando, Florida, USA, 13 July 1999, pp. 186–190.

[Sinclair and Clark(1999)] M. C. Sinclair and A. F. Clark, "Evolving an artificial vision system: Initial considerations," in *Evolution of Sensors in Nature, Hardware, and Simulation*, D. Polani, T. Uthmann, and K. Dautenhahn, Eds., Orlando, Florida, USA, 13 July 1999, pp. 191–195.

[Hutt and Keating(1999)] B. Hutt and D. Keating, "The evolution of an eye in visually guided foraging agents," in *Evolution of Sensors in Nature, Hardware, and Simulation*, D. Polani, T. Uthmann, and K. Dautenhahn, Eds., Orlando, Florida, USA, 13 July 1999, pp. 196–200.

[Liese et al.(1999)Liese, Polani, and Uthmann] A. Liese, D. Polani, and T. Uthmann, "Evolution of the spectral properties of a visual agent receptor," in *Evolution of Sensors in Nature, Hardware, and Simulation*, D. Polani, T. Uthmann, and K. Dautenhahn, Eds., Orlando, Florida, USA, 13 July 1999, pp. 201–206.

[Sinclair et al.(1999)Sinclair, Corne, and Smith] M. C. Sinclair, D. Corne, and G. D. Smith, "Evolutionary telecommunications: Past, present, and future," in *Evolutionary Telecommunications: Past, Present, and Future*, M. C. Sinclair, D. Corne, and G. D. Smith, Eds., Orlando, Florida, USA, 13 July 1999, p. 208.

[Sinclair(1999)] M. C. Sinclair, "Evolutionary telecommunications: A summary," in *Evolutionary Telecommunications: Past, Present, and Future*, M. C. Sinclair, D. Corne, and G. D. Smith, Eds., Orlando, Florida, USA, 13 July 1999, pp. 209–212.

[Davis(1999)] L. Davis, "Telecommunications and the evolution of algorithms," in *Evolutionary Telecommunications: Past, Present, and Future*, M. C. Sinclair, D. Corne, and G. D. Smith, Eds., Orlando, Florida, USA, 13 July 1999, pp. 213–214.

[Munetomo(1999)] M. Munetomo, "Designing genetic algorithms for adaptive routing algorithms in the internet," in *Evolutionary Telecommunications: Past, Present, and Future*, M. C. Sinclair, D. Corne, and G. D. Smith, Eds., Orlando, Florida, USA, 13 July 1999, pp. 215–216.

[Smith(1999a)] G. D. Smith, "Genetic algorithms for mobile and satellite telecommunication systems," in *Evolutionary Telecommunications: Past, Present, and Future*, M. C. Sinclair, D. Corne, and G. D. Smith, Eds., Orlando, Florida, USA, 13 July 1999, pp. 217–218.

[Smith(1999b)] R. E. Smith, "Embodiment of evolutionary computation in network agents," in *Evolutionary Telecommunications: Past, Present, and Future*, M. C. Sinclair, D. Corne, and G. D. Smith, Eds., Orlando, Florida, USA, 13 July 1999, pp. 219–220.

[Wood(1999)] D. H. Wood, "Getting our bearings in dna computing: A panel discussion," in *Getting Our Bearings in DNA Computing*, D. H. Wood, Ed., Orlando, Florida, USA, 13 July 1999, pp. 222–224.

[Freitas(1999)] A. A. Freitas, "A summary of the papers presented at the joint aaai-99 and gecco-99 workshop on data mining with evolutionary algorithms: Research directions," in *Joint GECCO-99 and AAAI-99 Workshop Data Mining with Evolutionary Algorithms: Research Directions*, A. A. Freitas, Ed., Orlando, Florida, USA, 13 July 1999, p. 226.

[Bonarini et al.(1999)Bonarini, Bonacina, and Matteucci] A. Bonarini, C. Bonacina, and M. Matteucci, "Fuzzy and crisp representations of real-valued input for learning classifier systems," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 228–235.

[Booker(1999)] L. B. Booker, "Do we really need to estimate rule utilities in classifier systems?" in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 236–241.

[Butz and Stolzmann(1999)] M. Butz and W. Stolzmann, "Action-planning in anticipatory classifier systems," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 242–249.

[Holmes(1999)] J. H. Holmes, "Quantitative methods for evaluating learning classifier system performance in forced two-choice decision tasks," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 250–257.

[Kovacs(1999)] T. Kovacs, "Strength or accuracy? a comparison of two approaches to fitness calculation in learning classifier systems," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 258–265.

[Lattaud(1999)] C. Lattaud, "Non-homogenous classifier systems in a macro-evolution process," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 266–271.

[Saxon and Barry(1999)] S. Saxon and A. Barry, "Xcs and the monk's problems," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 272–281.

[Smith et al.(1999)Smith, Dike, Ravichandran, El-Fallah, and Mehra] R. E. Smith, B. A. Dike, B. Ravichandran, A. El-Fallah, and R. K. Mehra, "The fighter aircraft lcs: A case of different lcs goals and techniques," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 282–289.

[Stolzmann(1999)] W. Stolzmann, "Latent learning in khepera robots with anticipatory classifier systems," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 290–297.

[Tomlinson and Bull(1999a)] A. Tomlinson and L. Bull, "A corporate xcs," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 298–305.

[Tomlinson and Bull(1999b)] ——, "A zeroth level corporate classifier system," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 306–313.

[Westerdale(1999)] T. H. Westerdale, "Wilson's error measurement and the markov property – identifying detrimental classifiers," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 314–321.

[Wilson(1999)] S. W. Wilson, "State of xcs classifier system research," in *2nd International Workshop on Learning Classifier Systems*, P. L. Lanzi, W. Stolzmann, and S. W. Wilson, Eds., Orlando, Florida, USA, 13 July 1999, pp. 322–334.

[Antipov(1999)] E. Antipov, "A max 1s problem in dna computing via gas," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 338.

[Anwar(1999)] A. Anwar, "Sparse distributed memory with evolutionary mechanisms," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 339–340.

[Card(1999)] S. Card, "Genetic programming of wavelet networks for time series prediction," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 341–342.

[Cardalda(1999)] J. J. R. Cardalda, "Musical adaptive systems," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 343–344.

[Costa(1999)] J. C. Costa, "Artificial life modeling of downy mildew of the grapevine," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 346–347.

[Dopico(1999)] J. R. R. Dopico, "Search and generation of heuristic rules of experience for the simplification of ann training with genetic algorithm," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 348.

[Eldershaw and Cameron(1999)] C. Eldershaw and S. Cameron, "Motion planning using gas," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 349.

[Etaner-Uyar(1999)] S. Etaner-Uyar, "New operators and dominance scheme for a diploid ga," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 350–351.

[Feyzbakhsh(1999)] S. A. Feyzbakhsh, "The new methodology of adam-eve-like genetic algorithm for cost optimization," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 352.

[Gallego-Schmid(1999)] M. Gallego-Schmid, "Modified antnet: software application in the evaluation and management of a telecommunication network," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 353–354.

[Giacobini(1999)] M. Giacobini, "A randomness test for binary sequences based on evolutionary algorithms," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 355–356.

[Hidalgo(1999)] J. I. Hidalgo, "Graph partitioning methods for multi-fpga systems and reconfigurable hardware using genetic algorithms," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 357–358.

[Kalganova(1999)] T. Kalganova, "A new evolutionary hardware approach for logic design," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 360–361.

[Kanade(1999)] U. Kanade, "A study of arithmetic genetic encoding for highly randomized fitness landscapes," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 362–363.

[Karle(1999)] V. Karle, "Algorithm for the paratransit vehicle routing problem using a modified crossover operator based on adjacency relations," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 364.

[Keijzer(1999)] M. Keijzer, "Scientific discovery using genetic programming," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 365–366.

[Khalak(1999)] A. Khalak, "Evolutionary model of open source software: economic impact," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 367–368.

[Kim(1999)] J. Kim, "An artificial immune system for network intrusion detection," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 369–370.

[Krasnogor(1999)] N. Krasnogor, "Coevolution of genes and memes in memetic algorithms," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 371.

[Kumar(1999)] S. Kumar, "Lessons from nature: The benefits of embryology," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 372–373.

[Li(1999)] J. Li, "Fgp: A genetic programming tool for financial prediction," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 374.

[Livingstone(1999)] D. Livingstone, "On modelling the evolution of language and languages," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 375–376.

[Lukschandl(1999)] E. Lukschandl, "Evolving the behavior of collaborating entities using genetic programming," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 377–378.

[Marino(1999)] A. Marino, "Sexual vs. asexual recombination for the graph coloring problem with hybrid genetic algorithms," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 379–380.

[Mehrotra(1999)] R. Mehrotra, "Gust loads and gust methods for predicting aircraft loads and dynamic response," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 381–382.

[Monett(1999)] D. Monett, "Genetic algorithm techniques and intelligent agents design for the mathematical modeling of chemical processes in medicine," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 383–385.

[Noda(1999)] E. Noda, "Discovering interesting prediction rules with a genetic algorithm," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 386–387.

[Ochoa(1999)] G. Ochoa, "The multiple roles of recombination in gas," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 388.

[Olsson(1999)] L. Olsson, "Strategy evolution for electronic markets using genetic programming," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 389.

[O'Neill(1999)] M. O'Neill, "Automatic programming with grammatical evolution," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 390–391.

[Parandekar(1999)] A. Parandekar, "Genetic algorithm-based optimizer: A java based teaching tool," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 392–393.

[Podgorelec(1999)] V. Podgorelec, "Medical diagnosis prediction using genetic programming," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 394–395.

[Porter(1999)] R. Porter, "Ga-accelerators using fpgas," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 396–397.

[Pratihar(1999)] D. K. Pratihar, "Optimal path and gait generations simultaneously of a six-legged robot using a ga-fuzzy approach," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 398–399.

[Quick(1999)] T. Quick, "Embodiment as situated structural coupling," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 400.

[Rekiek(1999)] B. Rekiek, "Multiple-objectives genetic algorithm," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 401.

[Santana(1999)] R. Santana, "On estimation distribution algorithms," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 402.

[Sheehan(1999)] L. Sheehan, "Self-tuning evolutionary system," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 403.

[bin Suen and shiang Kouh(1999)] J. bin Suen and J. shiang Kouh, "Genetic algorithms for optimal series propeller design," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 404–405.

[Suppapitnarm(1999)] A. Suppapitnarm, "Simulated annealing: An alternative approach to true multiobjective optimization," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 406–407.

[Taghiyareh(1999)] F. Taghiyareh, "Toward designing a new parallel fine-grain genetic algorithm," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 408.

[Teuscher(1999)] C. Teuscher, "Romero's pilgrimage to santa fe: A tale of robot evolution," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 409–410.

[Hoyweghen(1999)] C. V. Hoyweghen, "Symmetry in the representation of an optimization problem," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 411.

[Vele-Langs(1999)] O. Vele-Langs, "A genetic metaheuristic for traveling salespersons problem," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 412–413.

[Voss(1999)] M. Voss, "Evolutionary algorithm for structural optimization," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 414–415.

[Watson(1999)] R. Watson, "Evolution and problem decomposition," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 416–417.

[Zemke(1999)] S. Zemke, "Amalgamation of genetic selection and boosting," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, pp. 418–419.

[Zhang(1999b)] J. Zhang, "Niching in an es context," in *Graduate Student Workshop*, U.-M. O'Reilly, Ed., Orlando, Florida, USA, 13 July 1999, p. 420.