

Список литературы

- [1] L. Panait and S. Luke, A comparison of two competitive fitness functions, 2002, Submitted to GECCO 2002.
- [2] P. Angeline and J. Pollack, Competitive environments evolve better solutions for complex tasks, pp. 264–270.
- [3] D. Cliff and G. F. Miller, Tracking the red queen: Measurements of adaptive progress in co-evolutionary simulations, in *Proceedings of the Third European Conference on Artificial Life*, pp. 200–218, Springer-Verlag, 1995.
- [4] R. Eriksson and B. Olsson, Cooperative coevolution in inventory control optimisation, in *Proceedings of the Third International Conference on Artificial Neural Networks and Genetic Algorithms*, edited by G. Smith, N. Steele, and R. Albrecht, University of East Anglia, Norwich, UK, 1997, Springer.
- [5] S. Ficici and J. Pollack, A game-theoretic approach to the simple coevolutionary algorithm, pp. 467–476.
- [6] S. Ficici and J. Pollack, Effects of finite populations on evolutionary stable strategies, pp. 880–887.
- [7] S. Ficici and J. Pollack, Game-theoretic investigation of selection methods used in evolutionary algorithms, pp. 880–887.
- [8] S. Ficici and J. Pollack, Challenges in coevolutionary learning: Arms-race dynamics, open-endedness, and mediocre stable states, in *Proceedings of the Sixth International Conference on Artificial Life*, edited by A. et al, pp. 238–247, Cambridge, MA, 1998, MIT Press.
- [9] Brandeis University Report No., , 2001 (unpublished).
- [10] D. Hillis, Artificial Life II, SFI Studies in the Sciences of Complexity **10**, 313 (1991).
- [11] P. Husbands and F. Mill, Simulated coevolution as the mechanism for emergent planning and scheduling, in *Proceedings of the Fourth International Conference on Genetic Algorithms*, edited by R. Belew and L. Booker, pp. 264–270, Morgan Kaufmann, 1991.
- [12] P. Husbands, Distributed coevolutionary genetic algorithms for multi-criteria and multi-constraint optimisation, in *Evolutionary Computing, AISB Workshop for Selected Papers*, pp. 150–165, Springer-Verlag, 1994.
- [13] C. Rosin and R. Belew, Evolutionary Computation **5**, 1 (1996).
- [14] H. Juillé and J. Pollak, Co-evolving intertwined spirals, pp. 461–468.
- [15] A. Lubberts and R. Miikkulainen, Co-evolving a Go-playing neural network, in *Coevolution: Turning Adaptive Algorithms upon Themselves, (Birds-on-a-Feather Workshop, Genetic and Evolutionary Computation Conference)*, 2001.
- [16] D. E. Moriarty and R. Mikkulainen, Connection Science **7**, 105 (1995).
- [17] D. Moriarty and R. Miikkulainen, Evolutionary Computation **5**, 373 (1997).
- [18] J. Paredis, Steps towards co-evolutionary classification networks, in *Artificial Life IV, Proceedings of the fourth International Workshop on the Synthesis and Simulation of Living Systems.*, edited by R. A. Brooks and P. Maes, pp. 359–365, MIT Press, 1994.
- [19] M. Potter and K. De Jong, Evolutionary Computation **8**, 1 (2000).
- [20] M. Potter and K. De Jong, A cooperative coevolutionary approach to function optimization, pp. 249–257.
- [21] M. Potter and K. De Jong, Evolving neural networks with collaborative species, pp. 307–317.

- [22] M. Potter, *The Design and Analysis of a Computational Model of Cooperative CoEvolution*, PhD thesis, George Mason University, Fairfax, Virginia, 1997.
- [23] M. Potter and K. De Jong, The coevolution of antibodies for concept learning, pp. 530–539.
- [24] C. Rosin and R. Belew, *Evolutionary Computation* **5**, 1 (1997).
- [25] C. Rosin and R. Belew, Methods for competitive co-evolution: Finding opponents worth beating, pp. 373–380.
- [26] J. Paredis, *Artificial Life Journal* **2** (1996).
- [27] D. Schlierkamp-Voosen and H. Mühlenbein, Strategy adaptation by competing subpopulations, pp. 199–108.
- [28] J. Pollack and A. Blair, *Machine Learning* **32**, 225 (1998).
- [29] K. Sims, Evolving three-dimensional morphology and behaviour, in *Evolutionary Design by Computers*, edited by P. Bentley, Morgan Kaufmann, 1999.
- [30] J. Pollack, A. Blair, and M. Land, Coevolution of a backgammon player, in *Artificial Life V*, MIT Press, 1997.
- [31] H. Mayer, Symbiotic coevolution of artificial neural networks and training data sets, pp. 511–520.
- [32] C. Rosin, *Coevolutionary Search Among Adversaries*, PhD thesis, University of California, San Diego, 1997.
- [33] R. P. Wiegand, W. Liles, and K. De Jong, Analyzing cooperative coevolution with evolutionary game theory, (To appear).
- [34] R. P. Wiegand, Applying diffusion to a cooperative coevolutionary model, pp. 560–569.
- [35] R. P. Wiegand, W. Liles, and K. De Jong, An empirical analysis of collaboration methods in cooperative coevolutionary algorithms, pp. 1235–1242.
- [36] G. Fogel, P. Andrews, and D. Fogel, *Ecological Modeling* **109**, 283 (1998).
- [37] D. Fogel, G. Fogel, and P. Andrews, *BioSystems* **44**, 135 (1995).
- [38] D. Fogel and G. Fogel, Evolutionary stable strategies are not always stable under evolutionary dynamics, in *Proceedings of the Fourth Annual Conference on Evolutionary Programming*, edited by J. R. McDonnell, R. G. Reynolds, and D. Fogel, pp. 565–577, Cambridge, MA, 1995, MIT Press.
- [39] S. Kauffman, Coevolution to the edge of chaos: coupled fitness landscapes, poised states, and coevolutionary avalanches, in *Artificial Life II: Studies in the Sciences of Complexity*, edited by C. Langton, C. Taylor, J. Farmer, and S. Rasmussen, volume X, pp. 325–369, Addison-Wesley, 1991.
- [40] L. Pagie and H. P., Information integration and red queen dynamics in coevolutionary optimization, pp. 1260–1267.
- [41] L. Pagie and M. Mitchell, A comparison of evolutionary and coevolutionary search, pp. 20–25.
- [42] L. Pagie and P. Hogeweg, *Evolutionary Computation* **5**, 401 (1997).
- [43] L. Pagie, *Coevolutionary dynamics: information integration, speciation, and red queen dynamics*, PhD thesis, University of New Mexico, Santa Fe, NM, 1999.
- [44] R. Watson and J. Pollack, Coevolutionary dynamics in a minimal substrate, pp. 702–709.
- [45] R. P. Wiegand, W. Liles, and K. De Jong, Multi-population symmetric game dynamics, 2001, In preparation.

- [46] H. Juillé, Basic concepts in coevolution, 2001, Presentation at GECCO-01 Coevolutionary Workshop.
- [47] S. Luke, Genetic programming produced competitive soccer softbot teams for RoboCup97, in *Genetic Programming 1998: Proceedings of the Third Annual Conference*, edited by J. R. Koza *et al.*, pp. 214–222, University of Wisconsin, Madison, Wisconsin, USA, 1998, Morgan Kaufmann.
- [48] R. Axelrod, *The Evolution of Cooperation* (Basic Books, 1984).
- [49] D. Fogel, *Blondie24: Playing at the Edge of Artificial Intelligence* (Morgan Kaufmann, 2001).
- [50] K. Sims, Evolving 3D morphology and behavior by competition, in *Artificial Life IV, Proceedings of the fourth International Workshop on the Synthesis and Simulation of Living Systems.*, edited by R. A. Brooks and P. Maes, pp. 28–39, MIT Press, 1994.
- [51] C. Reynolds, Competition, coevolution and the game of tag, in *Artificial Life IV, Proceedings of the fourth International Workshop on the Synthesis and Simulation of Living Systems.*, edited by R. A. Brooks and P. Maes, pp. 59–69, MIT Press, 1994.
- [52] R. Smith and B. Gray, University of Alabama, Department of Engineering Science and Mechanics Report No. TCGA 94002, 1993 (unpublished).
- [53] Axelrod, The evolution of strategies in the iterated prisoner’s dilemma, in *Genetic Algorithms and Simulated Annealing*, edited by L. Davis, Morgan Kaufmann, 1987.