## Список литературы

- [1] L. Panait and S. Luke, A comparison of two competitive fitness functions, 2002, Submitted to GECCO 2002.
- 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 sumulations, 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, openendedness, 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] S. Ficici and J. Pollack, Pareto optimality in coevolutionary learning, Technical report, Brandeis University, 2001.
- [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 Fourch 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 interwined 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, 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. McDonnel, 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, W. Banzhaf, K. Chellapilla, K. Deb, M. Dorigo, D. B. Fogel, M. H. Garzon, D. E. Goldberg, H. Iba, and R. Riolo, 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, Blondie 24: 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, Co-adaptive genetic algorithms: An example in othello strategy, Technical Report TCGA 94002, University of Alabama, Department of Engineering Science and Mechanics, 1993.
- [53] Axelrod, in *Genetic Algorithms and Simulated Annealing*, edited by L. Davis, Morgan Kaufmann, 1987.