## Список литературы

- [Angeline & Pollack()] Angeline, P. & Pollack, J. (). Competitive environments evolve better solutions for complex tasks.
- [Axelrod(1987)] AXELROD (1987). The evolution of strategies in the iterated prisoner's dilemma. In: Genetic Algorithms and Simulated Annealing (DAVIS, L., ed.). Morgan Kaufmann.
- [Axelrod(1984)] Axelrod, R. (1984). The Evolution of Cooperation. Basic Books.
- [Cliff & Miller(1995)] CLIFF, D. & MILLER, G. F. (1995). Tracking the red queen: Measurements of adaptive progress in co-evolutionary sumulations. In: *Proceedings of the Third European Conference on Artificial Life*. Springer-Verlag.
- [Eriksson & Olsson(1997)] ERIKSSON, R. & OLSSON, B. (1997). Cooperative coevolution in inventory control optimisation. In: *Proceedings of the Third International Conference on Artificial Neural Networks and Genetic Algorithms* (SMITH, G., STEELE, N. & ALBRECHT, R., eds.). University of East Anglia, Norwich, UK: Springer.
- [Ficici & Pollack(a)] Ficici, S. & Pollack, J. (a). Effects of finite populations on evolutionary stable strategies.
- [Ficici & Pollack(b)] Ficici, S. & Pollack, J. (b). Game-theoretic investigation of selection methods used in evolutionary algorithms.
- [Ficici & Pollack(c)] Ficici, S. & Pollack, J. (c). A game-theoretic approach to the simple coevolutionary algorithm.
- [Ficici & Pollack(1998)] Ficici, S. & Pollack, J. (1998). Challenges in coevolutionary learning: Arms-race dynamics, open-endedness, and mediocre stable states. In: *Proceedings of the Sixth International Conference on Artificial Life* (ET AL, A., ed.). Cambridge, MA: MIT Press.
- [Ficici & Pollack(2001)] Ficici, S. & Pollack, J. (2001). Pareto optimality in coevolutionary learning. Tech. rep., Brandeis University.
- [Fogel(2001)] Fogel, D. (2001). Blondie24: Playing at the Edge of Artificial Intelligence. Morgan Kaufmann.
- [Fogel & Fogel(1995)] Fogel, D. & Fogel, G. (1995). Evolutionary stable strategies are not always stable under evolutionary dynamics. In: *Proceedings of the Fourth Annual Conference on Evolutionary Programming* (McDonnel, J. R., Reynolds, R. G. & Fogel, D., eds.). Cambridge, MA: MIT Press.
- [Fogel et al.(1995)Fogel, Fogel & Andrews] FOGEL, D., FOGEL, G. & ANDREWS, P. (1995). On the instability of evolutionary stable strategies. BioSystems 44, 135–152.
- [Fogel et al.(1998)Fogel, Andrews & Fogel] Fogel, G., Andrews, P. & Fogel, D. (1998). On the instability of evolutionary stable strategies in small populations. *Ecological Modeling* **109**, 283–294.
- [Hillis(1991)] HILLIS, D. (1991). Co-evolving parasites improve simulated evolution as an optimization procedure. Artificial Life II, SFI Studies in the Sciences of Complexity 10, 313–324.
- [Husbands(1994)] Husbands, P. (1994). Distributed coevolutionary genetic algorithms for multi-criteria and multi-constraint optimisation. In: *Evolutionary Computing*, *AISB Workshop for Selected Papers*. Springer-Verlag.
- [Husbands & Mill(1991)] Husbands, P. & Mill, F. (1991). Simulated coevolution as the mechanism for emergent planning and scheduling. In: *Proceedings of the Fourch International Conference on Genetic Algorithms* (Belew, R. & Booker, L., eds.). Morgan Kaufmann.
- [Juillé(2001)] Juillé, H. (2001). Basic concepts in coevolution. Presentation at GECCO-01 Coevolutionary Workshop.

- [Juillé & Pollak()] Juillé, H. & Pollak, J. (). Co-evolving interwined spirals.
- [Kauffman(1991)] KAUFFMAN, S. (1991). Coevolution to the edge of chaos: coupled fitness landscapes, poised states, and coevolutionary avalanches. In: Artificial Life II: Studies in the Sciences of Complexity (Langton, C., Taylor, C., Farmer, J. & Rasmussen, S., eds.), vol. X. Addison-Wesley.
- [Lubberts & Miikkulainen(2001)] Lubberts, A. & Miikkulainen, R. (2001). Co-evolving a Goplaying neural network. In: Coevolution: Turning Adaptive Algorithms upon Themselves, (Birdson-a-Feather Workshop, Genetic and Evolutionary Computation Conference).
- [Luke(1998)] Luke, S. (1998). Genetic programming produced competitive soccer softbot teams for RoboCup97. In: Genetic Programming 1998: Proceedings of the Third Annual Conference (Koza, J. R., Banzhaf, W., Chellapilla, K., Deb, K., Dorigo, M., Fogel, D. B., Garzon, M. H., Goldberg, D. E., Iba, H. & Riolo, R., eds.). University of Wisconsin, Madison, Wisconsin, USA: Morgan Kaufmann. URL http://www.cs.gmu.edu/~sean/papers/robocupgp98.pdf.
- [Mayer()] Mayer, H. (). Symbiotic coevolution of artificial neural networks and training data sets.
- [Moriarty & Miikkulainen(1997)] MORIARTY, D. & MIIKKULAINEN, R. (1997). Forming neural networks through efficient and adaptive coevolution. *Evolutionary Computation* **5**(4), 373–399.
- [Moriarty & Mikkulainen(1995)] MORIARTY, D. E. & MIKKULAINEN, R. (1995). Discovering complex othello strategies through evolutionary neural networks. *Connection Science* **7**(3), 105–209.
- [Pagie(1999)] Pagie, L. (1999). Coevolutionary dynamics: information integration, speciation, and red queen dynamics. Ph.D. thesis, University of New Mexico, Santa Fe, NM.
- [Pagie & Hogeweg(1997)] PAGIE, L. & HOGEWEG, P. (1997). Evolutionary consequences of coevolving targets. Evolutionary Computation 5(4), 401–418.
- [Pagie & Mitchell()] Pagie, L. & Mitchell, M. (). A comparison of evolutionary and coevolutionary search.
- [Pagie & P.()] Pagie, L. & P., H. (). Information integration and red queen dynamics in coevolutionary optimization.
- [Panait & Luke(2002)] PANAIT, L. & LUKE, S. (2002). A comparison of two competitive fitness functions. Submitted to GECCO 2002.
- [Paredis(1994)] PAREDIS, J. (1994). Steps towards co-evolutionary classification networks. In: Artificial Life IV, Proceedings of the fourth International Workshop on the Synthesis and Simulation of Living Systems. (Brooks, R. A. & Maes, P., eds.). MIT Press.
- [Paredis(1996)] Paredis, J. (1996). Coevolutionary computation. Artificial Life Journal 2(3).
- [Pollack & Blair(1998)] Pollack, J. & Blair, A. (1998). Coevolution in the successful learning of backgammon strategy. *Machine Learning* **32**(3), 225–240.
- [Pollack et al.(1997)Pollack, Blair & Land] Pollack, J., Blair, A. & Land, M. (1997). Coevolution of a backgammon player. In: Artificial Life V. MIT Press.
- [Potter(1997)] POTTER, M. (1997). The Design and Analysis of a Computational Model of Cooperative CoEvolution. Ph.D. thesis, George Mason University, Fairfax, Virginia.
- [Potter & De Jong(a)] POTTER, M. & DE JONG, K. (a). The coevolution of antibodies for concept learning.
- [Potter & De Jong(b)] Potter, M. & De Jong, K. (b). A cooperative coevolutionary approach to function optimization.
- [Potter & De Jong(c)] Potter, M. & De Jong, K. (c). Evolving neural networks with collaborative species.

- [Potter & De Jong(2000)] POTTER, M. & DE JONG, K. (2000). Cooperative coevolution: An architecture for evolving coadapted subcomponents. *Evolutionary Computation* 8(1), 1–29.
- [Reynolds(1994)] REYNOLDS, C. (1994). 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. (Brooks, R. A. & Maes, P., eds.). MIT Press.
- [Rosin(1997)] ROSIN, C. (1997). Coevolutionary Search Among Adversaries. Ph.D. thesis, University of California, San Diego.
- [Rosin & Belew()] ROSIN, C. & BELEW, R. (). Methods for competitive co-evolution: Finding opponents worth beating.
- [Rosin & Belew(1996)] ROSIN, C. & BELEW, R. (1996). New methods for competitive coevolution. Evolutionary Computation 5(1), 1–29.
- [Rosin & Belew(1997)] ROSIN, C. & BELEW, R. (1997). New methods for competitive coevolution. Evolutionary Computation 5(1), 1–29.
- [Schlierkamp-Voosen & Mühlenbein()] Schlierkamp-Voosen, D. & Mühlenbein, H. (). Strategy adaptation by competing subpopulations.
- [Sims(1994)] Sims, K. (1994). 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. (Brooks, R. A. & Maes, P., eds.). MIT Press.
- [Sims(1999)] Sims, K. (1999). Evolving three-dimensional morphology and behaviour. In: *Evolutionary Design by Computers* (Bentley, P., ed.). Morgan Kaufmann.
- [Smith & Gray(1993)] SMITH, R. & GRAY, B. (1993). Co-adaptive genetic algorithms: An example in othello strategy. Tech. Rep. TCGA 94002, University of Alabama, Department of Engineering Science and Mechanics.
- [Watson & Pollack()] Watson, R. & Pollack, J. (). Coevolutionary dynamics in a minimal substrate.
- [Wiegand()] Wiegand, R. P. (). Applying diffusion to a cooperative coevolutionary model.
- [Wiegand et al.(a)Wiegand, Liles & De Jong] WIEGAND, R. P., LILES, W. & DE JONG, K. (a). Analyzing cooperative coevolution with evolutionary game theory. (To appear).
- [Wiegand et al.(b)Wiegand, Liles & De Jong] WIEGAND, R. P., LILES, W. & DE JONG, K. (b). An empirical analysis of collaboration methods in cooperative coevolutionary algorithms.
- [Wiegand et al.(2001)Wiegand, Liles & De Jong] WIEGAND, R. P., LILES, W. & DE JONG, K. (2001). Multi-population symmetric game dynamics. In preparation.