

Список литературы

- [Panait and Luke(2002)] L. Panait and S. Luke, “A comparison of two competitive fitness functions,” 2002, submitted to GECCO 2002.
- [Angeline and Pollack()] P. Angeline and J. Pollack, “Competitive environments evolve better solutions for complex tasks,” pp. 264–270.
- [Cliff and Miller(1995)] 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*. Springer-Verlag, 1995, pp. 200–218.
- [Eriksson and Olsson(1997)] 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*, G. Smith, N. Steele, and R. Albrecht, Eds. University of East Anglia, Norwich, UK: Springer, 1997.
- [Ficici and Pollack(a)] S. Ficici and J. Pollack, “A game-theoretic approach to the simple coevolutionary algorithm,” pp. 467–476.
- [Ficici and Pollack(b)] —, “Effects of finite populations on evolutionary stable strategies,” pp. 880–887.
- [Ficici and Pollack(c)] —, “Game-theoretic investigation of selection methods used in evolutionary algorithms,” pp. 880–887.
- [Ficici and Pollack(1998)] —, “Challenges in coevolutionary learning: Arms-race dynamics, open-endedness, and mediocre stable states,” in *Proceedings of the Sixth International Conference on Artificial Life*, A. et al, Ed. Cambridge, MA: MIT Press, 1998, pp. 238–247.
- [Ficici and Pollack(2001)] —, “Pareto optimality in coevolutionary learning,” Brandeis University, Tech. Rep., 2001.
- [Hillis(1991)] D. Hillis, “Co-evolving parasites improve simulated evolution as an optimization procedure,” *Artificial Life II, SFI Studies in the Sciences of Complexity*, vol. 10, pp. 313–324, 1991.
- [Husbands and Mill(1991)] 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*, R. Belew and L. Booker, Eds. Morgan Kaufmann, 1991, pp. 264–270.
- [Husbands(1994)] P. Husbands, “Distributed coevolutionary genetic algorithms for multi-criteria and multi-constraint optimisation,” in *Evolutionary Computing, AISB Workshop for Selected Papers*. Springer-Verlag, 1994, pp. 150–165.
- [Rosin and Belew(1996)] C. Rosin and R. Belew, “New methods for competitive coevolution,” *Evolutionary Computation*, vol. 5, no. 1, pp. 1–29, 1996.
- [Juillé and Pollak()] H. Juillé and J. Pollak, “Co-evolving intertwined spirals,” pp. 461–468.
- [Lubberts and Miikkulainen(2001)] 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.
- [Moriarty and Mikkulainen(1995)] D. E. Moriarty and R. Mikkulainen, “Discovering complex othello strategies through evolutionary neural networks,” *Connection Science*, vol. 7, no. 3, pp. 105–209, 1995.
- [Moriarty and Miikkulainen(1997)] D. Moriarty and R. Miikkulainen, “Forming neural networks through efficient and adaptive coevolution,” *Evolutionary Computation*, vol. 5, no. 4, pp. 373–399, 1997.

- [Paredis(1994)] 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.*, R. A. Brooks and P. Maes, Eds. MIT Press, 1994, pp. 359–365.
- [Potter and De Jong(2000)] M. Potter and K. De Jong, “Cooperative coevolution: An architecture for evolving coadapted subcomponents,” *Evolutionary Computation*, vol. 8, no. 1, pp. 1–29, 2000.
- [Potter and De Jong(a)] —, “A cooperative coevolutionary approach to function optimization,” pp. 249–257.
- [Potter and De Jong(b)] —, “Evolving neural networks with collaborative species,” pp. 307–317.
- [Potter(1997)] M. Potter, “The design and analysis of a computational model of cooperative coevolution,” Ph.D. dissertation, George Mason University, Fairfax, Virginia, 1997.
- [Potter and De Jong(c)] M. Potter and K. De Jong, “The coevolution of antibodies for concept learning,” pp. 530–539.
- [Rosin and Belew(1997)] C. Rosin and R. Belew, “New methods for competitive coevolution,” *Evolutionary Computation*, vol. 5, no. 1, pp. 1–29, 1997.
- [Rosin and Belew()] —, “Methods for competitive co-evolution: Finding opponents worth beating,” pp. 373–380.
- [Paredis(1996)] J. Paredis, “Coevolutionary computation,” *Artificial Life Journal*, vol. 2, no. 3, 1996.
- [Schlierkamp-Voosen and Mühlenbein()] D. Schlierkamp-Voosen and H. Mühlenbein, “Strategy adaptation by competing subpopulations,” pp. 199–108.
- [Pollack and Blair(1998)] J. Pollack and A. Blair, “Coevolution in the successful learning of backgammon strategy,” *Machine Learning*, vol. 32, no. 3, pp. 225–240, 1998.
- [Sims(1999)] K. Sims, “Evolving three-dimensional morphology and behaviour,” in *Evolutionary Design by Computers*, P. Bentley, Ed. Morgan Kaufmann, 1999.
- [Pollack et al.(1997)] J. Pollack, A. Blair, and M. Land, “Coevolution of a backgammon player,” in *Artificial Life V*. MIT Press, 1997.
- [Mayer()] H. Mayer, “Symbiotic coevolution of artificial neural networks and training data sets,” pp. 511–520.
- [Rosin(1997)] C. Rosin, “Coevolutionary search among adversaries,” Ph.D. dissertation, University of California, San Diego, 1997.
- [Wiegand et al.(a)] R. P. Wiegand, W. Liles, and K. De Jong, “Analyzing cooperative coevolution with evolutionary game theory,” (To appear).
- [Wiegand()] R. P. Wiegand, “Applying diffusion to a cooperative coevolutionary model,” pp. 560–569.
- [Wiegand et al.(b)] R. P. Wiegand, W. Liles, and K. De Jong, “An empirical analysis of collaboration methods in cooperative coevolutionary algorithms,” pp. 1235–1242.
- [Fogel et al.(1998)] G. Fogel, P. Andrews, and D. Fogel, “On the instability of evolutionary stable strategies in small populations,” *Ecological Modeling*, vol. 109, pp. 283–294, 1998.
- [Fogel et al.(1995)] D. Fogel, G. Fogel, and P. Andrews, “On the instability of evolutionary stable strategies,” *BioSystems*, vol. 44, pp. 135–152, 1995.
- [Fogel and Fogel(1995)] 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*, J. R. McDonnell, R. G. Reynolds, and D. Fogel, Eds. Cambridge, MA: MIT Press, 1995, pp. 565–577.

- [Kauffman(1991)] 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*, C. Langton, C. Taylor, J. Farmer, and S. Rasmussen, Eds., vol. X. Addison-Wesley, 1991, pp. 325–369.
- [Pagie and P.()] L. Pagie and H. P., "Information integration and red queen dynamics in coevolutionary optimization," pp. 1260–1267.
- [Pagie and Mitchell()] L. Pagie and M. Mitchell, "A comparison of evolutionary and coevolutionary search," pp. 20–25.
- [Pagie and Hogeweg(1997)] L. Pagie and P. Hogeweg, "Evolutionary consequences of coevolving targets," *Evolutionary Computation*, vol. 5, no. 4, pp. 401–418, 1997.
- [Pagie(1999)] L. Pagie, "Coevolutionary dynamics: information integration, speciation, and red queen dynamics," Ph.D. dissertation, University of New Mexico, Santa Fe, NM, 1999.
- [Watson and Pollack()] R. Watson and J. Pollack, "Coevolutionary dynamics in a minimal substrate," pp. 702–709.
- [Wiegand et al.(2001)Wiegand, Liles, and De Jong] R. P. Wiegand, W. Liles, and K. De Jong, "Multi-population symmetric game dynamics," 2001, in preparation.
- [Juillé(2001)] H. Juillé, "Basic concepts in coevolution," 2001, presentation at GECCO-01 Coevolutionary Workshop.
- [Luke(1998)] S. Luke, "Genetic programming produced competitive soccer softbot teams for RoboCup97," in *Genetic Programming 1998: Proceedings of the Third Annual Conference*, 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, Eds. University of Wisconsin, Madison, Wisconsin, USA: Morgan Kaufmann, Jul. 1998, pp. 214–222. [Online]. Available: <http://www.cs.gmu.edu/~sean/papers/robocupgp98.pdf>
- [Axelrod(1984)] R. Axelrod, *The Evolution of Cooperation*. Basic Books, 1984.
- [Fogel(2001)] D. Fogel, *Blondie24: Playing at the Edge of Artificial Intelligence*. Morgan Kaufmann, 2001.
- [Sims(1994)] 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.*, R. A. Brooks and P. Maes, Eds. MIT Press, 1994, pp. 28–39.
- [Reynolds(1994)] 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.*, R. A. Brooks and P. Maes, Eds. MIT Press, 1994, pp. 59–69.
- [Smith and Gray(1993)] R. Smith and B. Gray, "Co-adaptive genetic algorithms: An example in othello strategy," University of Alabama, Department of Engineering Science and Mechanics, Tech. Rep. TCGA 94002, 1993.
- [Axelrod(1987)] Axelrod, "The evolution of strategies in the iterated prisoner's dilemma," in *Genetic Algorithms and Simulated Annealing*, L. Davis, Ed. Morgan Kaufmann, 1987.