

Irodalomjegyzék

- Adeli, H. and Hung, S.-L. (1995). *Machine Learning. Neural Networks, Genetic Algorithms, and Fuzzy Systems*. Wiley, New York.
- Akaike, H. (1972). Information Theory and an Extension of the Maximum Likelihood Principle. In *Second Intnl. Symposium on Information Theory*, pages 267–281, Budapest. Akadémiai Kiadó.
- Alba, E., Aldana, J. F., and Troya, J. M. (1993). Genetic Algorithms as Heuristics for Optimising ANN Design. In Albrecht, R. F., Reeves, C. R., and Steele, N. C., editors, *Proc. of the International Conference on Artificial Neural Nets and Genetic Algorithms*, pages 683–690. Springer Verlag.
- Albus, J. S. (1975). A New Approach to Manipulator Control: The Cerebellar Model Articulation Controller (CMAC). *Transaction of the ASME*, pages 220–227.
- Álmos, A. (2001). Advanced Genetic Methods for Map Labeling. In *IEEE Mini-Symposium at Department of Measurement and Information Systems, Budapest University of Technology and Economics*, pages 8–9.
- Álmos, A. and Várkonyi-Kóczy, A. R. (2000). Genetic Methods for Point Labeling on Maps. In P. Sincak, J. V., editor, *Quo Vadis Computational Intelligence? - New Trends and Approaches in Computational Intelligence (Studies in Fuzziness and Soft Computing Vol. 54)*. Physica-Verlag.
- Angeline, P. J. and Pollack, J. B. (1992). The evolutionary induction of subroutines. In *Proceedings of the Fourteenth Annual Conference of the Cognitive Science Society*, Bloomington, Indiana, USA. Lawrence Erlbaum.

- Axelrod, R. (1984). *The Evolution of Cooperation*. Basic Books, New York.
- Bagley, J. D. (1967). *The behavior of adaptive systems which employ genetic and correlation algorithms*. PhD thesis, University of Michigan. Dissertation Abstracts International 28(12), 5106B, University Microfilms Number 68-7556.
- Balakrishnan, K. and Honavar, V. (1995). *Evolutionary Design of Neural Architectures - A Preliminary Taxonomy and Guide to Literature*. Number 95-01. Artificial Intelligence Group, CSTR.
- Belew, R. K., McInerney, J., and Schraudolph, N. N. (1992). Evolving networks: Using Genetic Algorithms with Connectionist Learning. In Langton, C. G., Taylor, C., Farmer, J. D., and Rasmussen, S., editors, *Artificial Life II*, Santa Fe Institute Studies in the Sciences of Complexity, pages 511–547, Reading, MA. Addison-Wesley.
- Berry, M. V. and Lewis, Z. V. (1980). On the Weierstrass-Mandelbrot fractal function. *Proc. Royal Soc. Lond.*, A 370:459–484.
- Bethke, A. D. (1980). *Genetic Algorithms as Function Optimizers*. PhD thesis, University of Michigan, Ann Arbor, MI. Computer and Communication Sciences, Dissertation Abstracts International 41(9), 3503B, University Microfilms Number 8106101.
- Billings, S. and Zheng, G. L. (1995). Radial Basis Function Network Configuration Using Genetic Algorithms. *Neural Networks*, 8(6):877–890.
- Bishop, C. M. (1995). *Neural Networks for Pattern Recognition*. Clarendon Press, Oxford.
- Bosworth, J. L., Foo, N. Y., and Zeigler, B. P. (1972). Comparison of genetic algorithms with conjugate gradient methods. Technical report, NASA.
- Botzheim, J., Hámori, H., and Kóczy, L. T. (2001). Optimisation of trapezoidal membership functions in a fuzzy rule system, by the "bacterial algorithm" approach. In *BUSEFAL*.
- Box, G. E. P. (1957). Evolutionary operation: A method for increasing industrial productivity. *Applied Statistics*, 6(2):81–101.
- Box, G. E. P. and Draper, N. (1969). *Evolutionary Operation*. New York: John Wiley and Sons, Inc.

- Bremermann, H. J. (1962). Optimization through evolution and recombination. In Yovitis, M. C. and Jacobi, G. T., editors, *Self-Organizing Systems*, pages 93–106. Spartan, Washington, D.C.
- Bremermann, H. J., Rogson, M., and Salaff, S. (1965). Search by evolution. In M. Maxfield, A. C. and Fogel, L. J., editors, *Biophysics and Cybernetic Systems - Proceedings of the 2nd Cybernetic Sciences Symposium*, pages 157–167. Spartan Books, Washington, D.C.
- Brown, M. and Harris, C. (1994). *Neurofuzzy Adaptive Modelling and Control*. Prentice Hall, New York.
- Cavicchio, D. J. (1970). *Adaptive search using simulated evolution*. PhD Thesis, University of Michigan, Ann Arbor.
- Chalmers, D. J. (1991). The Evolution of Learning: An experiment in Genetic Connectionism. In Touretzky, D. S., editor, *Proc. of the Fourth International Conference on Genetic Algorithms*, pages 249–256, San Mateo, CA. Morgan Kaufmann.
- Christensen, J., Marks, J., and Shieber, S. (1995). An Empirical Study of Algorithms for Point-Feature Label Placement. *ACM Transactions on Graphics*, 14(3):203–232.
- Cramer, N. L. (1985). A representation for the Adaptive Generation of Simple Sequential Programs. In Grefenstette, J. J., editor, *Proceedings of an International Conference on Genetic Algorithms and the Applications*, pages 183–187, Carnegie-Mellon University, Pittsburgh, PA, USA.
- Cybenko, G. (1989). Approximation by Superposition of Sigmoidal Functions. *Mathematical Control Signals Systems*, 2:303–314.
- Darwin, C. (1859). *On the Origin of Species*. John Murray, London.
- Davis, T. E. and Principe, J. C. (1991). A simulated annealing like convergence theory for the simple genetic algorithm. In Belew, R. and Booker, L., editors, *Proceedings of the Fourth International Conference on Genetic Algorithms*, pages 174–181, San Mateo, CA. Morgan Kaufman.
- Delibassis, K. and Undrill, P. E. (1996). Genetic algorithm implementation of stack filter design for image restoration. In *IEEE Proc. Vision, Image & Signal Processing*, 143, 3, pages 177–183.

- Derrida, B. (1981). Random-energy model: An exactly solvable model of disordered systems. *Physical Review*, B24(5):2613–2626.
- Edmondson, S., Christensen, J., Marks, J., and Shieber, S. (1997). A General Cartographic Labeling Algorithm. *Cartographica*, 33(4):13–23.
- Ewens, W. J. (1979). *Mathematical Population Genetics*. Springer-Verlag, New York.
- Fecher, G. (2000). *Map Labeling using Genetic Algorithms*. Diploma Thesis, Budapest University of Technology and Economics.
- Feller, W. (1968). *An introduction to Probability Theory and its Applications*. Wiley, New York.
- Fitzpatrick, J. M., Greffenstette, J. J., and Gucht, D. V. (1984). Image registration by genetic search. In *Proceedings of the IEEE Southeast Conference*, pages 460–464.
- Fletcher, R. and Powell, M. J. D. (1963). A rapidly convergent descent method for minimization. *Computer Journal*, 6:163–168.
- Fogel, D. B. (1991). *System Identification Through Simulated Evolution: A machine Learning Approach to modeling*. Ginn Press, 160 Gould Street, Needham Heights, MA 01294.
- Fogel, D. B. (1992a). An Analysis of Evolutionary Programming. In Fogel, D. B. and Atmar, W., editors, *Proceedings of the First Annual Conference on Evolutionary Programming*, pages 43–51, La Jolla, California.
- Fogel, D. B. (1992b). *Evolving Artificial Intelligence*. PhD thesis, University of California, San Diego.
- Fogel, D. B. and Atmar, W., editors (1993). *Proceedings of the 2nd Annual Conference on Evolutionary Programming*.
- Fogel, L. J. (1964). *On the Organization of Intellect*. PhD thesis, University of California, Los Angeles.
- Fogel, L. J., Owens, A. J., and Walsh, M. J. (1966). *Artificial Intelligence Through simulated Evolution*. John Wiley and Sons, New York.
- Frantz, D. R. (1972). *Non-linearities in genetic adaptive search*. PhD thesis, University of Michigan. Dissertation Abstracts International 33(11), 5240B-5241B, University Microfilms Number 73-11,116.

- Friedberg, R. M. (1958). A Learning Machine: Part I. *IBM Journal of Research and Development*, 2(1):2–13.
- Friedberg, R. M., Dunham, B., and North, J. H. (1959). A Learning Machine: Part II. *IBM Journal of Research and Development*, 3(3):282–287.
- Fujiki, C. and Dickinson, J. (1987). Using the Genetic Algorithm to Generate Lisp Source Code to Solve the Prisoner’s Dilemma. In Grefenstette, J. J., editor, *Genetic Algorithms and their Applications: Proceedings of the second international conference on Genetic Algorithms*, pages 236–240, MIT, Cambridge, MA, USA. Lawrence Erlbaum Associates.
- Fujiwara, Y. and Sawai, H. (1999). Evolutionary Computation Applied to Mesh Optimization of a 3-D Facial Image. *IEEE Trans. on Evolutionary Computation*, 3(2):113–123.
- Funahashi, K. I. (1989). On the Approximate Realization of Continuous Mappings by Neural Networks. *Neural Networks*, 2(3):183–192.
- Goldberg, D. and Segrest, P. (1987). Finite Markov Chain Analysis of Genetic Algorithms. In *Proceedings of the Second International Conference on Genetic Algorithms*.
- Goldberg, D. E. (1983). *Computer-aided gas pipeline operation using genetic algorithms and rule learning*. PhD Thesis, University of Michigan.
- Goldberg, D. E. (1987). Simple Genetic Algorithms and the Minimal, Deceptive Problem. In *Genetic Algorithms and Simulated Annealing*, pages 74–88. Morgan Kaufmann.
- Goldberg, D. E. (1989). *Genetic Algorithms in Search, Optimization and Machine Learning*. Addison-Wesley Publishing Company, Reading, Massachusetts.
- Goldberg, D. E. and Deb, K. (1991). A Comparative Analysis of Selection Schemes Used in Genetic Algorithms. In Rawlins, G. J. E., editor, *Foundations of Genetic Algorithms*. Morgan Kaufmann Publishers.
- Goldberg, D. E. and Samtani, M. P. (1986). Engineering optimization via genetic algorithm. In *Proceedings of the 9th Conference on Electronic Computation*, pages 471–482.

- Grefenstette, J. (1986). Optimization of Control Parameters for Genetic Algorithms. *IEEE Trans. on Systems, Man, and Cybernetics*, SMC-16(1):122–128.
- Gaffenstette, J. J. and Fitzpatrick, J. M. (1985). Genetic search with approximate function evaluations. In *Proceedings of an International Conference on Genetic Algorithms and Their Applications*, pages 112–120.
- Győri, S., Petres, Z., Baranyi, P., and Várkonyi-Kóczy, A. R. (2002). Modeling of the Human Liver-Bile System by Soft-Computing Methods. In *Proceedings of the IEEE Intelligent Engineering Systems 2002*, Opatija, Croatia.
- Győri, S., Petres, Z., and Várkonyi-Kóczy, A. R. (2001). A New Approach for Genetic Algorithms Based Timetabling in Schools. In *Proceedings of the IEEE Intelligent Engineering Systems 2001*, pages 79–84, Helsinki, Finland.
- Győri, S. and Salamon, G. (2001). *Statikus WDM hálózatok tervezése genetikus algoritmussal*. TDK dolgozat, Budapesti Műszaki és Gazdaságtudományi Egyetem.
- Harp, S. A. and Samad, T. (1991). Genetic Synthesis of Neural Network Architecture. In Davis, L. D., editor, *Handbook of Genetic algorithms*, pages 202–221. Van Nostrand Reinhold.
- Hashem, S. (1997). Optimal Linear Combinations of Neural Networks. *Neural Networks*, 10(4):599–614.
- Haykin, S. (1994). *Neural Networks A Comprehensive Foundation*. Macmillan College Publishing Co., New York.
- Hebb, D. O. (1949). *The Organization of Behaviour*. John Wiley and Sons, New York.
- Hillis, W. D. (1992). Co-evolving parasites improve simulated evolution as an optimization procedure. In Langton, C. G., Taylor, C., Farmer, J. D., and Rasmussen, S., editors, *Artificial Life II*. Addison-Wesley.
- Hirsch, S. A. (1982). An Algorithm for Automatic Name Placement Around Point Data. *The American Cartographer*, 9(1):5–17.
- Holland, J. H. (1975). *Adaptation in Natural and Artificial Systems*. University of Michigan Press, Ann Arbor, MI.

- Hollstien, R. B. (1971). *Artificial genetic adaptation in computer control systems*. PhD thesis, University of Michigan, Ann Arbor.
- Horváth G. (szerk.) (1998). *Neurális hálózatok és műszaki alkalmazásai*. Műegyetemi Kiadó, Budapest.
- Jacobs, R. A., Jordan, M. I., Nowlan, S. J., and Hinton, G. E. (1991). Adaptive Mixture of Experts. *Neural Computation*, 3:79–89.
- Jong, K. A. D. (1975). *An analysis of the behaviour of a class of genetic adaptive systems*. PhD Thesis, University of Michigan.
- Jong, K. A. D. (1980). *A genetic-based global function optimization technique*. Technical Report, No. 80-2, University of Pittsburgh.
- Jong, K. A. D. (1987). On using genetic algorithms to search program spaces. In *Proceedings of the 2nd International Conference on Genetic Algorithms and Their Applications*, pages 210–216, Hillsdale, NJ.
- Jordan, M. I. and Jacobs, R. A. (1994). Hierarchical Mixture of Experts and the EM algorithm. *Neural Computation*, 6:181–214.
- Kang, S. J., Woo, C.-H., Hwang, H.-S., and Woo, K. B. (2000). Evolutionary Design of Fuzzy Rule Base for Nonlinear System Modeling and Control. *IEEE Trans. Fuzzy Systems*, 8:37–45.
- Klir, G. J. and Folger, T. A. (1988). *Fuzzy Sets, Uncertainty and Information*. Prentice Hall.
- Klir, G. J. and Yuan, B. (1995). *Fuzzy sets and Fuzzy Logic. Theory and Application*. Prentice Hall, New Jersey, USA.
- Koza, J. R. (1992). *Genetic Programming: On the Programming of Computers by Natural Selection*. MIT Press, Cambridge, MA.
- Koza, J. R. (1994). *Genetic Programming II: Automatic Discovery of Reusable Programs*. MIT Press, Cambridge Massachusetts.
- Lichtfuss, H. J. (1965). *Evolution eines Rohrkrümmers*. PhD thesis, Technische Universität Berlin, Berlin.
- Maclin, R. F. (1995). *Learning from Instruction and Experience: Incorporating Procedural Domain Theories into Knowledge-Based Neural Networks*. Ph.d thesis, University of Wisconsin, Madison, USA.

- Mandelbrot, B. (1977). *Fractal Geometry of Nature*. W.H. Freeman, New York.
- Marks, J. and Shieber, S. (1991). The Computational Complexity of Cartographic Label Placement. Technical Report TR-05-91, Harvard CS.
- McCulloch, W. S. and Pitts, W. (1943). A Logical Calculus of Ideas Immanent in Nervous Activity. *Bulletin of Mathematical Biophysics*, pages 115–133.
- Nawa, N. E. and Furuhashi, T. (1999). Fuzzy System Parameters Discovery by Bacterial Evolutionary Algorithm. *IEEE Trans. Fuzzy Systems*, 7:608–616.
- Nix, A. and Vose, M. (1991). Modeling genetic algorithms with Markov chains. ms.
- Opitz, D. W. (1995). *An Anytime Approach to Connectionist Theory Refinement: Refining the Topologies of Knowledge-Based Neural Networks*. Ph.d thesis, University of Wisconsin, Madison, USA.
- Opitz, D. W. and Shavlik, J. W. (1996). Actively Searching for an Effective Neural-Network Ensemble. *Connection Science*, 8(3-4).
- O'Reilly, U.-M. and Oppacher, F. (1992). An Experimental Perspective on Genetic Programming. In Männer, R. and Manderick, B., editors, *Parallel Problem Solving from Nature 2*, pages 331–340, Brussels, Belgium. Elsevier Science.
- O'Reilly, U.-M. and Oppacher, F. (1994). Program Search with a Hierarchical Variable Length Representation: Genetic Programming, Simulated Annealing and Hill Climbing. In Davidor, Y., Schwefel, H.-P., and Männer, R., editors, *Parallel Problem Solving from Nature – PPSN III*, pages 397–406, Berlin. Springer.
- Pao, Y. H. (1989). *Adaptive Pattern Recognition and Neural Networks*. Addison-Wesley, Reading, Mass.
- Park, J. and Sandberg, I. W. (1993). Approximation and Radial-Basis-Function Networks. *Neural Computation*, 5(2):305–316.
- Prügel-Bennett, A. and Shapiro, J. (1994). An analysis of genetic algorithms using statistical mechanics. *Physical Review Letters*, 72(9):1305–1309.

- Radcliffe, N. J. (1991). Equivalence Class Analysis of Genetic Algorithms. *Complex Systems*, 5(2):183–205.
- Rechenberg, I. (1965). Cybernetic solution path of an experimental problem.
- Rechenberg, I. (1973). *Evolutionsstrategie: Optimierung technischer Systeme nach Prinzipien der biologischen Evolution*. frommann-holzbog, Stuttgart. German.
- Rissanen, J. (1978). Modelling by Shortest Data Description. *Automatica*, 14:465–471.
- Rosenberg, R. S. (1967). *Simulation of genetic populations with biochemical properties*. PhD thesis, University of Michigan. Dissertation Abstracts International 28(7), 2732B, University Microfilms Number 67-17,836.
- Rosenblatt, F. (1958). The Perceptron: A Probabilistic Model for Information Storage and Organization of the Brain. *Psychol. Rev.*, 65:386–408.
- Salmeri, M. R., Petrongari, E., and Cardarilli, G. C. (1999). *A Novel Bacterial Algorithm to Extract the Rule Base from a Training Set*. University of Rome.
- Sanchez, E. (1993). Fuzzy genetic algorithms in soft computing environment. In *Proc. of the 5th IFSA World Congress*, volume 1, pages 44–50, Seoul, Korea.
- Schaffer, J. D., editor (1989). *Proceedings of the 3rd International Conference on Genetic Algorithms and Their Applications*. Morgan Kaufmann Publ., San Mateo.
- Schaffer, J. D., Caruna, R. A., Eshelman, L. J., and Das, R. (1989). A study of control parameters affecting online performance of genetic algorithms for function optimization. In *Proceedings of the 3rd International Conference on Genetic Algorithms and Their Applications*, pages 51–60, San Mateo. Morgan Kaufmann Publ.
- Schaffer, J. D. and Morishima, A. (1987). An adaptive crossover distribution mechanism for genetic algorithms. In *Proceedings of the 2nd International Conference on Genetic Algorithms and Their Applications*, pages 36–40.

- Schwefel, H. P. (1965). *Kybernetische Evolution als Strategie der experimentellen Forschung in der Strömungstechnik*. Dipl.-Ing. Thesis, Technical University of Berlin, Hermann Föttinger-Institute for Hydrodynamics.
- Schwefel, H. P. (1975a). Binäre Optimierung durch somatische Mutation. Technical Report SFB 146, Technical University of Berlin and Medical Highschool of Hannover.
- Schwefel, H. P. (1975b). *Evolutionsstrategie und numerische Optimierung*. PhD thesis, Technische Universität Berlin, Berlin.
- Schwefel, H. P. (1977). *Numerische Optimierung von Computer-Modellen mittels der Evolutionsstrategie*. Birkhäuser, Basel. Volume 26 of Interdisciplinary Systems Research.
- Schwefel, H. P. (1981). *Numerical optimization of Computer models*. John Wiley and Sons, Ltd., Chichester.
- Sivalingam, K. and Subramaniam, S. (2000). *Optical WDM Networks: Principles and Practice*. Kluwer Academic Publishers, London.
- Sollich, P. and Krogh, A. (1996). Learning with Ensembles: How over-fitting can be useful. In Touretzky, D. S., Mozer, M. C., and Hasselmo, M. E., editors, *Advances in Neural Information Processing Systems 8.*, pages 190–196. MIT Press.
- Specht, D. (1990). Probabilistic Neural Networks and the Polynomial Adaline as Complementary Techniques for Classification. *IEEE Trans. on Neural Networks*, 1:111–121.
- Takács, O. and Várkonyi-Kóczy, A. R. (1999). Fuzzy Handling of Uncertainty in Nonlinear Systems. In *EUROFUSE-SIC*.
- Towell, G. G. (1991). *Symbolic Knowledge and Neural Networks: Insertion, Refinement and Extraction*. Ph.d thesis, University of Wisconsin, Madison, USA.
- van Dijk, S., Thierens, D., and de Berg, M. (1998). Robust genetic algorithms for high quality map labeling. Technical Report UU-CS-1998-41, UU.

- van Dijk, S., van Kreveld, M., Strijk, T., and Wolff, A. (1999). Towards an Evaluation of Quality for Label Placement Methods. In *Proceedings of the 19th International Cartographic Conference (ICA'99)*, pages 905–913, Ottawa. Int. Cartographic Association.
- Vose, M. D. (1991). Generalizing the notion of schema in genetic algorithms. *Artificial Intelligence*, 50:385–396.
- Vose, M. D. and Liepins, G. E. (1991). Punctuated Equilibria in Genetic Search. *Complex Systems*, 5:31–44.
- Várkonyi-Kóczy, A. R. and Dobrowiecki, T. P. (1997). Imprecise Methods in Measurement. In *Proc. of the 1997 IEEE Instrumentation & Measurement Technology Conference, IMTC'97*, pages 790–795, Ottawa, Canada.
- Wagner, F. and Wolff, A. (1995). An Efficient and Effective Approximation Algorithm for the Map Labeling Problem. In Spirakis, P., editor, *Proc. 3rd Annu. Europ. Symp. on Algorithms (ESA'95)*, volume 979 of *LNCS*, pages 420–433. SV.
- Wagner, F. and Wolff, A. (1998). A Combinatorial Framework for Map Labeling. In Whitesides, S. H., editor, *(GD'98)*, volume 1547 of *LNCS*, pages 316–331. SV.
- Wall, M. (1995). *GAlib onlie-documentation*. MIT.
- Weinberg, R. (1970). *Computer simulation of a living cell*. PhD Thesis, University of Michigan.
- Whitley, D. (1989). Using reproductive evaluation to improve genetic search and heuristic discovery. In *Proceedings of the 2nd International Conference on Genetic Algorithms and Their Applications*, pages 108–115.
- Whitley, D. (1994). A Genetic Algorithm Tutorial. *Statistics and Computing*, 4:65–85.
- Whitley, L. D., editor (1993). *Foundations of Genetic Algorithms 2*, San Mateo. Morgan Kaufmann.
- Widrow, B. and Lehr, M. A. (1990). 30 Years of Adaptive Neural Networks: Perceptron, Madeline and Backpropagation. *Proc. of the IEEE*, pages 1415–1442.

- Yager, R. (1995). *Fuzzy Logic in Control*. PhD thesis, TU Delft.
- Yager, R. and Filev, D. P. (1994). *Essentials of Fuzzy Modeling and Control*. Wiley, New York.
- Zadeh, L. A. Fuzzy logic and approximate reasoning. *Synthese*, 30(1):407–428.
- Zadeh, L. A. (1965a). Fuzzy Sets. *Information and Control*, 8(3):338–353.
- Zadeh, L. A. (1965b). Fuzzy sets and Systems. In Fox, J., editor, *System Theory*, pages 29–37, Brooklin. Polytechnic Press.
- Zadeh, L. A. (1968). Fuzzy Algorithms. *Information and Control*, 12(2):94–102.
- Zadeh, L. A. (1971). Towards a theory of fuzzy systems. In Kalman, R. E. and De Clairis, R. N., editors, *Aspects of Networks and System Theory*, pages 469–490, New York. Holt, Rinehart & Winston.
- Zadeh, L. A. (1972). A rationale for fuzzy control. *Journal of Dynamic Systems, Measurement and Control*, 94(1):3–4.
- Zadeh, L. A. (1973). Outline of a new approach to the analysis of complex systems and decision processes. *IEEE Trans. on Systems, Man and Cybernetics*, 1(1):28–44.