

Bibliografia

- [Ange-96] Angeline, P.J., Saunders, G.M. and J.B. Pollack, "An Evolutionary Algorithm that Constructs Recurrent Neural Networks", *IEEE Transactions on Neural Networks*, vol. 5, n° 1, 1996.
- [Ben-92] Bennani, Y. and P. Gallinari, "Task Decomposition Through a Modular Connectionist Architecture: A Talker Identification System", *Artificial Neural Networks*, 2, I. Aleksander and J. Taylor (eds.), Elsevier Science, 1992.
- [Bill-80] Billings, S.A., "Identification of Nonlinear Systems - a survey", *IEEE proceedings* Vol 127, N. 6, pp 272-285, 1980.
- [Born-78] Born, J., "Evolutionsstrategien zur numerischen Lösung von Adaptation-soufgaben", A dissertation, Humboldt-Universität, Berlin, 1978.
- [Bot-91] Bottou, L. and P. Gallinari, "A Framework for the Cooperation of Learning Algorithms", *Advances in Neural Processing Systems* 3, R. Lippmann, J. Moody and D. Touretzky (eds.), Morgan Kaufman, 1991.
- [Cat-94] Catfolis, T., "Mapping a Complex Temporal Problem into a Combination of Static and Dynamic Networks", *SIGART Bulletin*, vol. 5, n° 3, 1994.
- [Cat-97] Catfolis, T. and K. Meert, "Hybridization and Specialization of Real-time Recurrent Learning-based Neural Networks", *Connection Science*, vol. 9, n° 1, 1997.
- [Chal-90] Chalmers, D.J. "The Evolution of Learning: An Experiment in Genetic Connectionism", *Proceedings of the 1990 Connectionist Models Summer School*, (Touretzky, D.S., Elman, J.L., Sejnowski, T.J. and G.E. Hinton, eds.), Morgan Kaufmann, 1990.
- [Chen-95] Chen, H.W, "Modelling and Identification of Parallel Nonlinear Systems: Structural Classification and Parameter Estimation Methods", *Proceedings of the IEEE*, vol. 83, n° 1, 1995.
- [Chen-98] Chen, S.H. and Y.F. Liao, "Modular Recurrent Neural Networks for Mandarin Syllable Recognition", *IEEE Transactions on Neural Networks*, vol. 9, n° 6, 1998.
- [Codi-96] Codina, J. *Estructuració de Xarxes Connexionistes per a Modelitzar Sistemes Dinàmics*, Phd Thesis, Universitat Politècnica de Catalunya, 1996.

- [Cyb-89] Cybenko, G., "Approximation by superpositions of a sigmoidal function", *Math. Control, Signals and Systems*, vol. 2, n° 4, 1989.
- [Dav-91] Davis, L. (ed.), *Handbook of Genetic Algorithms*, Van Nostrand Reinhold, 1991.
- [Elsh-94] Elsherif, H. and M. Hambaba, "On Modifying the Weights in a Modular Recurrent Connectionist System", *Proceedings of the World Congress on Neural Networks*, 1994.
- [Esco-97] Escobet, T. *Aportació a la identificació paramètrica de sistemes dinàmics*. Phd Thesis, Universitat Politècnica de Catalunya, 1997.
- [Fau-94] Fausett, L., *Fundamentals of Neural Networks*, Prentice Hall, 1994.
- [Fog-66] Fogel, L.J., Owens, A.J. and M.J. Walsh, *Artificial Intelligence through Simulated Evolution*, Wiley, 1966.
- [Fog-93] Fogel, D.B. "Using Evolutionary Programming to Create Neural Networks that Are Capable of Playing Tic-Tac-Toe", *Proceedings of the International Conference on Neural Networks*, 1993.
- [Fogel-93] Fogelman Soulié, F., Lamy B. and E. Viennet, "Multi-Modular Neural Network Architectures: Applications in Optical Character and Human Face Recognition", *Int. Journal of Pattern Recognition and Artificial Intelligence*, vol. 7, n° 4, 1993.
- [Gol-89] Goldberg, D.E., *Genetic Algorithms in Search, optimization and Machine Learning*, Addison Wesley, 1989.
- [Hab-90] Haber, R. and H. Unbenhauen, "Structure Identification of Non Linear Dynamic Systems - A survey on input/output Approaches", *Automatica*, vol. 26, n° 4:651-677, 1990.
- [Hap-94] Happel, B.L.M. and J.M.J. Murre, "The design and evolution of modular neural network architectures", *Neural Networks*, 7: 985-1004, 1994.
- [Harp-91] Harp, S.A. and T. Samad, "Genetic Synthesis of Neural Network Architecture", *Handbook of Genetic Algorithms* (L. Davis, ed.), 1991.
- [Hertz-91] Hertz, J., Krogh, A. and R.G. Palmer, *Introduction to the Theory of Neural Computation*, Addison-Wesley, 1991.
- [Hol-75] Holland, J.H., *Adaptation in Natural and Artificial Systems*, The University of Michigan Press, Ann Arbor, 1975.

-
- [Hor-89] Hornik, K., Stinchcombe, M. and H. White, "Multilayer Feedforward Networks are Universal Approximators", *Neural Networks*, vol. 2, n° 5, 1989.
- [Hor-91] Hornik, K. "Approximation Capabilities of Multilayer Feedforward Networks", *Neural Networks*, vol. 4, 1991.
- [Hor-93] Hornik, K. "Some New Results on Neural Network Approximation", *Neural Networks*, vol. 6, 1993.
- [Hunt-92] Hunt, K.J., Sbarbaro, D., Zbikowski, R. and P.J. Gawthrop, "Neural Networks for Control Systems – A Survey", *Automatica*, vol 28, n° 6, 1992.
- [Hush-98] Hush, D.R. and B. Horne, "Efficient Algorithms for Function Approximation with Piecewise Linear Sigmoidal Networks", *IEEE Transactions on Neural Networks*, vol 9, n° 6, 1998.
- [Jac-93] Jacobs, R.A. and M.I. Jordan, "Learning Piecewise Control Strategies in a Modular Neural Network Architecture", *IEEE Transactions on System, Man and Cybernetics*, vol 23, n°2, 1993.
- [Jac-94] Jacobs, R.A. and M.I. Jordan, "Hierarchical Mixtures of Experts and the EM Algorithm", *Neural Networks*, vol. 6, 1994.
- [Jor-91] Jordan, M.I. and D.E. Rumelhart, "Forward Models: Supervised Learning with a Distal Teacher", MIT, Center for Cognitive Science, Occasional Paper #40, 1991.
- [Koehn-94] Koehn, P., *Combining Genetic Algorithms and Neural Networks: The Encoding Problem*, MsC Thesis, The University of Tennessee, 1994.
- [Kus-94] Kusçu, I. and C. Thornton, "Design of Artificial Neural Networks Using Genetic Algorithms: review and prospect", Cognitive and Computing Sciences, Tech. Rep., Univ. of Sussex, 1994.
- [Lev-93] Levin, A.U. and K.S. Narendra, "Control of Nonlinear Dynamical Systems Using Neural Networks: Controllability and Stabilization", *IEEE Transactions on Neural Networks*, vol 4, n° 2, 1993.
- [Lev-96] Levin, A.U. and K.S. Narendra, "Control of Nonlinear Dynamical Systems Using Neural Networks – Part II: Observability, Identification and Stabilization", *IEEE Transactions on Neural Networks*, vol 7, n° 1, 1996.
- [Ljung-87] Ljung, L., *System Identification – Theory for the User*, Prentice-Hall, 1987.
- [Ljung-92] Ljung, L. and J. Sjöberg, "A System Identification Perspective of Neural Networks", *IEEE Workshop on Neural Networks for Signal Processing*, 1992.

- [McD-93] McDonnell, J.R. and D. Waagen, "Evolving Neural Network Connectivity", *IEEE International Conference on Neural Networks*, 1993.
- [McD-96] McDonnell, J.R. and R. Waagen, "Evolving Recurrent Perceptrons", *IEEE Transactions on Neural Networks*, vol. 5, nº 1, 1996.
- [Mel-96] Meltser, M., Shoham, M. and L.M. Manevitz, "Approximating Functions by Neural Networks: A Constructive Solution in the Uniform Norm", *Neural Networks*, vol. 9, nº 6, 1996.
- [Mil-89] Miller, G.F., Todd, P.M. and S.U. Hedge, "Designing Neural Networks Using Genetic Algorithms", *Proceedings of the Third International Conference on Genetic Algorithms*, 1989.
- [Mor-95] Morcego, B., Català, A. and N. Piera. "Qualitative Approach to Gradient Based Learning Algorithms", *Proceedings of the International Workshop on Artificial Neural Networks*, 1995.
- [Mor-96a] Morcego, B., Fuertes, J.M., and G. Cembrano, "Neural Modules. Design of a Nonlinear Dynamic Systems Modelling Library of Neural Networks", Reporte técnico, Institut de Cibernètica (UPC - CSIC), 1996.
- [Mor-96b] Morcego, B., Fuertes, J.M. and G. Cembrano. "Neural Modules: Networks with Constrained Architectures for Nonlinear Function Identification", *Proceedings of the International Workshop on Neural Networks for Identification, Control, Robotics and Signal/Image Processing*. 1996.
- [Mor-97] Morcego, B., Fuertes, J.M., Codina, J. and G. Cembrano. "Modular Neural Network Framework for Nonlinear Dynamic Systems Modeling", TEMPUS Workshop MODIFY'97, 1997.
- [Nar-90] Narendra, K.S. and K. Parthasarathy, "Identification and Control of Dynamic Systems Using Neural Networks", *IEEE Transactions on Neural Networks*, vol. 1, N. 1, 1990.
- [Nar-90] Narendra, K.S. and K. Parthasarathy, "Identification and Control of Dynamical Systems Using Neural Networks", *IEEE Transactions on Neural Networks*, vol. 1, nº 1, 1990.
- [Nar-97] Narendra, K.S. and J. Balakrishnan, "Adaptive control using multiple models", *IEEE Transactions on Automatic Control*, 1997.
- [Net-87] Netushil, A., Baltrushevich, A., Burliaev, V, Kuzin, P. and N. Alexandrovski, "Teoría del Mando Automático", Ed. Mie, 1987.

- [Pear-97] Pearson, R.K. and B.A. Ogunnaike, "Nonlinear Process Identification", In Henson M.A. and D.E. Seborg (eds.), *Nonlinear Process Control*, Prentice Hall, 1997.
- [Petri-98] Petridis, V. and A. Kehagias, *Predictive Modular Neural Networks. Applications to Time Series*, Kluwer Academic, 1998.
- [Rad-93] Radcliffe, N.J., "Genetic Set Recombination and Its Application to Neural Network Topology Optimisation", *Neural Computing and Applications*, vol. 1, 1993.
- [Rum-86] Rumelhart, D.E., Hinton, G.E. and R.J. Williams, "Learning Internal Representations by Error Propagation", *Parallel Distributed Processing*, vol. 1, chap. 8, 1986.
- [Shar-96] Sharkey, A.J. (ed.) "Special Issue: Combining Artificial Neural Nets: Ensemble Approaches", *Connection Science*, vol 8, n° 3 & 4, 1996.
- [Shar-97] Sharkey, A.J. (ed.) "Special Issue: Combining Artificial Neural Nets: Modular Approaches", *Connection Science*, vol 9, n° 1, 1997.
- [Shar-99] Sharkey, A.J. (ed.) *Combining Artificial Neural Nets. Ensemble and Modular Multi-Net Systems*. Springer-Verlag, 1999.
- [Sjö-95] Sjöberj, J., Zhang, Q., Ljung, L., Benveniste, A., Delyon, B., Glorennec, P., Hjalmarsson, H. and A. Juditsky, "Nonlinear Black-box Modelling in System Identification: a Unified Overview", *Automatica*, vol 31, n° 12, 1995.
- [Söd-89] Söderstrom, T. and P. Stoica, *System Identification*, Prentice-Hall, 1989.
- [Solla-89] Solla, S.A., "Learning and Generalization in Layered Neural Networks: the Contiguity Problem", In L. Personnas and G. Dreyfus (eds.), *Neural Networks: from Models to Applications*. Paris: I.D.S.E.T., 1989.
- [Suy-96] Suykens, J.A.K, Vandewalle, J.P.L and B.L.R De Moor, *Artificial Neural Networks for Modelling and Control of Non-Linear Systems*, Kluwer Academic Publishers, 1996.
- [Tao-96] Tao, G. and P.V. Kokotovic, *Adaptive Control of Systems with Actuator and Sensor Nonlinearities*, John Wiley & Sons, 1996.
- [Wai-89] Waibel, A. "Modular Construction of Time-Delay Neural Networks for Speech Recognition", *Neural Computation*, vol. 1, 1989.
- [Wan-96] Wan, E.A. and F. Beaufays, "Diagrammatic Derivation of Gradient Algorithms for Neural Networks", *Neural Computation*, n° 8, 1995.

- [Yao-93] Yao, X., “Evolutionary Artificial Neural Networks”, *International Journal of Neural Systems*, vol. 4, n° 3, 1993.
- [Yao-98] Yao, X. and Y. Liu, “Making Use of Population Information in Evolutionary Artificial Neural Networks”, *IEEE Transactions on Systems, Man and Cybernetics (part B)*, vol. 28, n° 3, 1998.