Some references for computer models of "Mind" and "Brain"

Brains, Minds and Computers – D. Beeman

BOOKS ON ARTIFICIAL NEURAL NETWORKS

Introduction to the Theory of Neural Computation, John Hertz, Anders Krogh and Richard G. Palmer, Addison Wesley (1991). - one of the best

Fundamentals of Neural Networks: Architectures, Algorithms, and Applications, Laurene V. Fausett, Prentice Hall (1994). - an overview of many types of networks, with a short example application for each.

An Introduction to Neural Networks, James A. Anderson, MIT Press (1995). - makes a a more serious attempt to relate artificial and natural networks than most books on "neural nets" - has some Pascal examples.

"Artificial Neural Systems: Foundations, Paradigms, Applications, and Implementations", Patrick K. Simpson, Pergamon Press (1990) - gives an overview of 28 paradigms and has good references and bibliography.

"Neural Computing: Theory and Practice", Phillip D. Wasserman, Van Nostrand Reinhold (1989) - good basic book, clear presentation of algorithms, discussion of pros and cons of the models it covers

"Neural Computing, an introduction", R. Beale and T. Jackson, Adam Hilger Company (1990) - more introductory than the ones above - very readable

Neurocomputing, James A. Anderson and Edward Rosenfeld (Editors), MIT Press (1987) - a collection of classic papers

Parallel Distributed Processing, David E. Rumelhart, J. L. McClelland and the PDP Research Group, Vols. 1 and 2, MIT Press 1987 ("The PDP book") Ch. 2 gives a good introduction, Chs. 8 and 11 treat backpropagation, and Ch. 7 treats the Boltzmann machine.

Explorations in Parallel Distributed Processing, James L. McClelland and David E. Rumelhardt, MIT Press (1988) - gives instructions and exercises for the PDP neural net simulator (IBM PC disk included)

An Introduction to neural and electronic networks, edited by Steven F. Zornetzer, Joel L. Davis and Clifford Lau, Academic Press (1990). A good collection of chapters by different authors, ranging from purely biological studies to artificial neural networks.

JOURNALS AND CONFERENCE PROCEEDINGS

Neural Networks, Pergamon Press (Journal of the International Neural Network Society)

Neural computation (MIT Press)

Network: computation in neural systems (Bristol : IOP Publishing)

IEEE transactions on neural networks

Neural Networks for Computing (1986 Snowbird, UT Conf) AIP Conference

Proceedings #151, John S. Denker, ed.

Proceedings of the IEEE International Conference on Neural Networks, San Diego, June 1987, June 1988 (many mammoth volumes)

Proceedings of the International Joint International Conference on Neural Networks, published twice a year, 1989 - present (The yearly June San Diego IEEE conference is now part of the IJCNN, which also holds January meetings on the East Coast)

Advances in Neural Information Processing Systems (Vols. 1-6), edited by David Touretzky, Morgan Kaufmann Publishers (1989 - 1994). (proceedings of the NIPS conference held each November in Denver)

BOOKS ON BIOLOGICAL NEURAL NETWORKS

Methods in Neuronal Modeling: From Synapses to Networks, Christoph Koch and Idan Segev (Editors), MIT Press (1989)

The Book of GENESIS: Exploring Realistic Neural Models with the GEneral NEural SImulation System, J. M. Bower and D. Beeman, Springer (1994).

Neural and Brain Modelling, Ronald J. MacGregor, Academic Press (1987)

An Introduction to neural and electronic networks, Zornetzer, et. al. (listed above) has several chapters on biological neural networks

Computational Neuroscience, edited by Eric L. Schwartz, MIT Press (1990). This is another collection of chapters on diverse topics, by different authors.

Single Neuron Computation, edited by Thomas McKenna, Joel Davis, and Steven F. Zornetzer, Academic Press (1992). Fairly advanced, with chapters describing specific research simulations.

The Synaptic Organization of the Brain (3rd Edition), Gordon M. Shepherd (Editor), Oxford University Press (1990). Although not on computer modeling, this is the classic text on neural circuitry.

The NIPS proceedings (edited by D. Touretzky, listed above) have many papers on computation in neural systems.

BOOKS ON ARTIFICIAL INTELLIGENCE

A search of the CU library holdings for "Artificial Intelligence" shows about 700 titles! Here are two good introductory books:

Artificial intelligence, Elaine Rich, McGraw-Hill (1983)

Artificial intelligence, Patrick Henry Winston (2nd edition) Addison-Wesley (1984)