



KES'2003

**7th International Conference on
Knowledge-Based Intelligent Information & Engineering Systems**

3 - 5 September 2003, St Anne's College, University of Oxford, U.K.

Call for Papers

Invited Session on

Neural Networks as Universal Approximators

Topic

Learning by experience is an essential activity in neural networks for achieving information from environment. The ability in learning of a neural network is closely related to the approximating capabilities.

The capability of neural networks in approximating arbitrary non-random input-output mappings has been demonstrated in the earlier works with reference to multilayer feedforward networks, Radial Basis Neural Networks, Approximate Identity Neural Networks and so on. However it should be also noted that neural networks operates in an environment in which all the signals are undoubtedly stochastic. This occurs either because a noise could be superimposed to a signal (non stochastic) or, more generally, because the signal could be inherently stochastic in that a predictable part of the signal cannot be identified. Thus neural networks should have the ability in learning non-random input-output mappings in a stochastic environment or more generally stochastic processes.

Thus the aim of this session is to throw light on the capabilities of neural networks in approximating deterministic and/or random phenomena.

Instructions for Authors

Only electronic copies of the papers in Microsoft Word, PDF or Postscript forms are acceptable for review purposes and must be sent to the session chair. However, please note that you will be required to send hard copy of the final version of your paper, if it is accepted; electronic submission of final papers is not allowed.

Papers must correspond to the requirements detailed in the Instructions to Authors which are placed on the Conference Web Site,
www.bton.ac.uk/kes/kes2003/

All papers must be presented by one of the authors, who must pay fees.

Publication

The Conference Proceedings will be published by Springer-Verlag in Lecture Notes in AI as part of the LNCS/LNAI series.

Extended versions of selected papers will be considered for publication in the International Journal of Knowledge-Based Intelligent Engineering Systems,
www.bton.ac.uk/kes/journal/

Important Dates

Receipt of papers by Session Chair: **March 31, 2003**

Notification of acceptance: **April 7, 2003**

Camera-ready papers to session chair by: **April 16, 2003**

*(Session Chair must send final camera-ready papers to reach to KES Secretariat by **1 May 2003** or they will not appear in the proceedings).*

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