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IJCNN '91
SINGAPORE

THE **I**NSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS INC

INTERNATIONAL
JOINT CONFERENCE
ON NEURAL NETWORKS

WESTIN STAMFORD
& WESTIN PLAZA
NOVEMBER 18-21, 1991

Message from

PRESIDENT
IEEE Neural Networks Council

Welcome to the Singapore IJCNN!

After nearly a decade of deliberation, the jury is in. Neural Networks are an extraordinary engineering tool and are here to stay.

Here's why.

First, neural networks have been thrown at everything, and have stuck on some important areas. From brokers in commodity trading to power engineers controlling VAR flow, neural networks have been indisputably established and are currently used as viable tools in a number of applications. Secondly, useful dedicated hardware is here. The software and emulator boards on which we learned are looking less and less attractive to the serious neural smith who battles more and more grandiose problems.

As in any fast moving cutting edge technology, neural networks practitioners are uncovering and exploring new and related areas in intelligent systems. One of the most promising is the coupling of neural networks to fuzzy systems. After a few decades of living only on journal pages, fuzzy systems have recently established themselves via market place presence. The neural network looks as if it can help firm this presence.

Another related discipline is the genetic algorithm and related evolutionary programing. Like neural networks, the terminology used here relates only loosely to the biological counterpart, not unlike reference to 'rabbit ears' or an 'electronic eye'.

Genetic algorithms and fuzzy nets look quite promising. As a technology, they are roughly where neural networks were a decade ago. Like neural networks, they will be placed through a boot camp of comparison, application and implementation. I look forward to working with you to put them thorugh their drills. As in evolutionary programing, only the fittest will survive.

Happy networking,

Robert J. Marks II

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CALL FOR PAPERS

The IEEE Neural Networks Council and the International Neural Network Society (INNS) invite all persons interested in the field of Neural Networks to submit FULL PAPERS for possible presentation at the Conference.

FULL PAPERS must be received by **31 May 1991**. All submissions will be acknowledged by mail. International authors should submit their work via Air Mail or Express Courier so as to ensure timely arrival.

Papers will be reviewed by senior researchers in the field, and all authors will be informed of the decisions at the end of the review process. A limited number of papers will be accepted for oral and poster presentation. All papers accepted will be published in full in the Conference Proceedings which will be available at the Conference for distribution to all regular Conference registrants. **Only the abstracts of all papers accepted will be published in the final programme.**

FULL PAPERS may be submitted for consideration as oral or poster presentations in the following sessions :

- Associative Memory
- Electrical Neurocomputers
- Image Processing
- Invertebrate Neural Networks
- Machine Vision
- Neurocognition
- Neuro-Dynamics
- Optical Neurocomputers
- Optimization
- Robotics Control
- Sensation & Perception
- Sensorimotor Control Systems
- Supervised Learning
- Unsupervised Learning
- Neuro-physiology
- Hybrid System (A1,Neural Networks,Fuzzy System)
- Mathematical Methods
- Applications

REQUIREMENTS

Eight copies (One original and seven copies) are required for submission. **Do not fold or staple the original, camera-ready copy.** Papers of no more than 6 pages, including figures, tables, and references, should be written in English and only complete papers will be considered. There will be a charge of US$ 50 per page for papers exceeding 6 pages.

Papers must be submitted camera-ready on 8 1/2" X 11" white bond paper with 1" margins on all four sides. They should be prepared by typewriter or letter quality printer in one-column format, single spaced or similar type style of 10 points or larger and should be printed on one side of the paper only. **FAX submissions are not acceptable.**

Centred at the top of the first page should be the complete title, author name (s), affiliation(s) and mailing address(es). This is followed by a blank space and then the **abstract, up to 15 lines, followed by the text.**

In an accompanying letter, the following must be included :

- Corresponding author :
  Name
  Mailing address
  Telephone & **FAX numbers**

- Technical session :
  1st Choice
  2nd Choice

- Presentation preferred :
  Oral
  Poster

- Presenter :
  Name
  Mailing address
  Telephone and FAX numbers

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