CoNNections

The Newsletter of the IEEE Neural Networks Council

Conference Preview:

IEEE WORLD CONGRESS ON COMPUTATIONAL INTELLIGENCE
June 26-July 2, 1994
Walt Disney World Dolphin Hotel
Orlando Florida

Who *are* these people? See *VRAIS '93*, p. 5

IEEE Neural Networks Council Constituent Societies

Circuits and Systems Society
Communications Society
Computer Society
Control Systems Society
Engineering in Medicine & Biology Soc.
Industrial Electronics Society
Industry Applications Society
Information Theory Society

Lasers and Electro-Optics Society
Oceanic Engineering Society
Power Engineering Society
Robotics and Automation Society
Signal Processing Society
Social Implications of Technology
Systems, Man & Cybernetics Society

Officers and Committee Chairs

Council President: Russell C. Eberhart, Research Triangle Institute
Vice President: Patrick K. Simpson Orincon, Inc.
Past President: Robert J. Marks II, Univ. Washington
Secretary: Toshio Fukuda, Nagoya Univ
Treasurer: Roy S. Nutter, West Virginia Univ.
IEEE Trans. on Neural Networks Editor: Robert J. Marks II
IEEE Trans on Fuzzy Systems Editor: James Bezdek, University of West Florida

Standing Committee Chairs:
Meetings: James Bezdek, Univ. West Florida
Standards: Walter Karplus, UCLA
Publications: Stamatios Kartalopoulos, AT&T Bell Laboratories
Regional Interest Groups: Rick Alan, TRW Safety System
Fellows Committee: Robert W. Newcomb, University of Maryland
Awards: Bradley Dickinson, Princeton Univ.

President's Message

Russell C. Eberhart
Research Triangle Institute

This is my last President's Message. My second one-year term as President of the IEEE Neural Networks Council ends on December 31, 1993. The Council will be ably led by President-elect Pat Simpson in 1994.

I would like to thank all of you who have made being a part of the Council a positive and enriching experience. I'd especially like to thank all of the officers who have served for the past two years, as well as the chairs of the standing committees. Sometimes the work for the NNC has taken a significant amount of your personal time, and you all have always done what was necessary for the Council.

I would also like to reflect on where we've been, and where I hope we're going. We started out as an IEEE Technical Activities Board (TAB) Committee, and our first area of activities was neural networks. By the time we became a Council in 1990, with Bob Marks at the helm, we were initiating activities in fuzzy systems and evolutionary computation. Last year, I established the NNC Virtual Reality Technical Committee headed by Tom Caudell that organized and ran the 1993 Virtual Reality Annual International Symposium (VRAIS).

In addition to expanding our technical areas of activities, we have expanded our geographical scope. We have now held three neural networks conferences in Asia: 1991 in Singapore, 1992 in Beijing, and 1993 in Nagoya and a workshop in Russia. Future neural networks and fuzzy systems conferences are scheduled for Japan and Australia.

In the publications area, we have two exceptionally high-quality refereed publications, the *Transactions on Neural Networks* and the *Transactions on Fuzzy Systems*. Bob Marks and Jim Bezdek are handling the difficult and complex editorial positions effectively and efficiently.

Council volunteers have also distinguished themselves in the areas of IEEE standards (Walter Karplus), publications (Stamatios Kartalopoulos), regional activities (Rick Alan), meetings (Jim Bezdek), and IEEE fellows (Bob Newcomb).

There are many more people I'd like to thank, and who deserve to be named. Heading this list are the AdCom members who have conscientiously and creatively represented their member societies.

There have been a few (but only a few!) disappointments along the way. The biggest disappointment to me is the refusal of the IEEE TAB to approve our request to change our name from the "Council on Neural Networks" to the "Council on Computational Intelligence." This refusal flies in the face of logic: we are active in all of the areas now known as computational intelligence, and our premier conference activity is the World Congress on Computational Intelligence. We are also applying to publish the *Journal of Applied Computational Intelligence*. But at least one very large society in the IEEE is jealous of what they perceive to be their "turf." Oh, well. Actions speak louder than words, and the NNC is definitely leading the activities in the computational intelligence field.

Finally, I'd like to take this opportunity to urge that we remain a Council, and not attempt to become an IEEE society. I believe that we have the benefit of the "cream of the crop" as representatives of the societies on our AdCom. We are doing things, not just talking about them. We generally have the enthusiastic cooperation of our member societies in our endeavors. And our field of interest cuts across most of the societies of the IEEE. I believe that trying to surgically remove computational intelligence from all the societies so as to create a new society would be very difficult, if not impossible. And we would become "just another society," in competition with all the rest. We would lose our uniqueness, and our spirit of cooperation across the IEEE.

And there's a broader issue that I believe is important. The proliferation of IEEE societies cannot continue indefinitely. The IEEE is going to have to restructure. It's just a matter of time. And some kind of matrix organization with societies as vertical organizations and councils as horizontal ones may be worth considering.

My experience in the IEEE has been, and I'm sure will continue to be, a very rewarding experience, both professionally and personally. I feel especially privileged to have traveled in, and learned a little about the cultures of, China, Singapore, Japan, Australia and India. When I was growing up in Kansas, I never dreamed that I'd call people from all of these countries "Friend." But I do, and these friendships, together with others I've gained worldwide, are the highlight of my IEEE experience.

I'm sure I'll stay involved with the Council and the IEEE. It's a part of me.