

Editorial

The Inauguration of a New Publication



WE welcome you to the first issue of the IEEE TRANSACTIONS ON NEURAL NETWORKS, an archival publication devoted to the science and technology of neural networks. Interest in neural networks is going through explosive growth; we anticipate that this TRANSACTIONS will serve this growth by providing readers with the latest information and by providing authors with rapid publication.

This TRANSACTIONS will publish high-quality papers on the theory, design, and application of neural networks, ranging from software to hardware. Emphasis will be given to artificial neural networks. Readers are encouraged to submit manuscripts which disclose significant technical achievements, indicate exploratory developments, or present significant applications for neural networks. This TRANSACTIONS also contains a Letters section intended to serve as a vehicle for rapid publication of short correspondence concerning new research results. Prospective authors should consult Information for Authors on the inside back cover.

This first issue contains a section called Scanning the Issue which gives the reader a quick introduction to the papers contained in the issue. This year this TRANSACTIONS will be published quarterly (four issues). It is anticipated that in 1991, this TRANSACTIONS will go to bi-monthly publication (six issues) with a corresponding increase in pages.

Neural Networks Council

This TRANSACTIONS is published under the sponsorship of the IEEE Neural Networks Council, an organization within the framework of the IEEE. The IEEE Neural Networks Council is composed of the following ten IEEE societies, which reflect the wide range of disciplines within its scope:

- Circuits and Systems;
- Communications;
- Control Systems;
- Engineering in Medicine and Biology;
- Industrial Electronics;
- Information Theory;
- Lasers and Electro-Optics;
- Robotics and Automation;
- Signal Processing; and
- Systems, Man, and Cybernetics.

The IEEE Neural Networks Council also sponsors conferences, and in 1990 it cosponsors two International Joint Conferences on Neural Networks (IJCNN), one held January 15-19, 1990, in Washington, DC, and one to be held June 17-21, 1990, in San Diego, CA.

Appreciation

The creation of a new publication is an immense undertaking, and we thank the many people who have made it possible. In particular, Bob Marks, President of the IEEE Neural Networks Council, has provided valuable leadership and steady support. The members of the Executive Advisory Board of this TRANSACTIONS (Shun-Ichi Amari, Leon Cooper, Robert Hecht-Nielsen, John Hopfield, Teuvo Kohonen, Carver Mead, and Bernard Widrow) have provided much needed advice during the initial stages. For this first issue the Associate Editors and the reviewers have done an excellent job under a tight time schedule. We thank them and the authors. We hope that you, the readers, appreciate our efforts in this new endeavor.

HERBERT E. RAUCH
Editor