

**Proceedings of the IEEE-INNS-ENNS
International Joint Conference on
Neural Networks**

IJCNN 2000

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**Proceedings of the IEEE-INNS-ENNS
International Joint Conference on
Neural Networks**

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*Neural Computing: New Challenges and Perspectives
for the New Millennium*

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AEI—the Italian Association of Electrical and Electronic Engineers
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Edited by Shun-Ichi Amari, C. Lee Giles, Marco Gori, and Vincenzo Piuri



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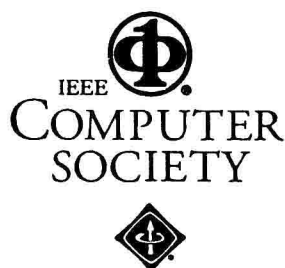
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Message from the Conference Chairpersons

The IEEE-INNS-ENNS International Joint Conference on Neural Networks (IJCNN 2000) in Como, Italy, is the year 2000 edition of a long and successful series that gathered the most outstanding scientists and practitioners in all areas of neural network theory and applications from all over the world. This is the first time that the conference is held in Europe, as a worldwide recognition of the European contribution to the field. We are honored by this and grateful to the sponsoring bodies.

The topic of this edition is “*Neural Computing: New Challenges and Perspectives for the New Millennium.*” We recognize in fact a compelling need to compare, update, and share our knowledge and best practice to deal effectively with the evolving challenges coming from research, industry, and daily life in the upcoming millennium. This conference aims therefore to become a milestone, an opportunity for all of us to review our past and to define new challenges and perspectives for the foregoing years.

The research on artificial neural networks comprises a wide spectrum of directions, both theoretical and practical. This conference reflects all these aspects in detail and offers the possibility of discussing and comparing the latest results obtained by researchers all over the world. In particular the conference sessions will cover topics related to aspects of computational intelligence, cognitive neuroscience, neural network architectures, hardware implementations, hybrid systems, and applications. This makes IJCNN 2000 a major international forum for researchers, practitioners, policy makers, industries, and all people who are interested in the latest developments both of research and application of neural networks.

The conference will offer a number of high quality tutorials on basic aspects as well as on recent advancements, a wide technical program with plenty of sessions to present results of worldwide research and application efforts, some interesting plenary talks by outstanding scientists, and interactive panels for open discussion on some hot topics. Organizing a large conference like IJCNN 2000 is a complex task involving many people for a number of different aspects. We want therefore to thank everyone who contributed to the organization: without their valuable efforts the meeting could not have been held.

Although the new telecommunication technologies will allow easy, fast and wide long distance communications and information access, direct human interaction—happily—still remains fundamental to exchange ideas, establish new links, make new friends, and create new opportunities for international cooperation.

We wish all the attendees an enjoyable participation in the conference and a nice stay in Italy!

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