

Neural Information Processing

ICONIP2001 PROCEEDINGS

8th International Conference on Neural Information Processing

November 14–18, 2001
Shanghai, China

Volume 2

Edited by Liming Zhang and Fanji Gu

Fudan University Press

8th International Conference on Neural Information Processing

ICONIP2001

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Fudan University Press
579 Guoquan Rd. Shanghai, 200433, China

(2001 Shanghai International Industrial FAIR Science Technology Forum)

Greetings From Steering Committee

Dear colleagues:

On behalf of the steering committee of ICONIP2001-Shanghai, I would like to extend to all the participants the sincerest greetings and warmest welcome.

Thanks to Prof. Amari and Fukushima from Japan, Prof. Wu from China, Prof. Lee from Korea and many other friends from AP region, ICONIP, earliest initiated during IJCNN1992-Beijing last century, has been a stable and strong platform for exchanging ideas, sharing experiences and exploring solutions among the scientists, professors and engineers in neural networks and the related fields within APNNA family.

The major goal of science and technology, to my understanding, is to find the good approaches to strengthening the human abilities among which the intelligence is the most demanding. Many evidences show that neural networks and the mechanisms of neural information processing would be the promising ones. On the other hand, however, the ever-made progress, up to the present stage, seems still very far from what ones expected. Hence there lies a long long way for us to go.

It has been getting more and more clear during the last decades that interdisciplinary cooperation would be much more effective than any other single disciplinary effort, even as neural networks, in the exploration of human intelligence as it may be the object with the highest complexity. As the result, it is a strong suggestion that a multi-disciplinary cooperation be specially encouraged among neural networks, artificial intelligence, biology, neurology, cognitive science, information science, knowledge theory, cybernetics, system theory, computer science, signal processing, and the like.

It is happy to see from the Proceedings of ICONIP2001 that this conference, like the previous ones, has implemented such multi-disciplinary cooperation. But it seemed not sufficient yet. It is our hope that more colleagues from various related fields and various regions in the world get together to make greater progress and more significant contributions to the human kinds.

Wish ICONIP2001-Shanghai a successful conference, wish the friendship within APNNA family everlasting, and, above all, wish all participants have an enjoyable and pleasant stay in Shanghai, China.

Professor Tian-De Shou
Professor Yi-Xin Zhong
Steering Committee Chairs

Message From The Program Committee

Dear Colleagues:

As Program Committee Chairmen of ICONIP2001, we are deeply honored to welcome you, our colleagues from all over the world, to the eighth International Conference on Neural Information Processing in Shanghai, China.

In the past few years, neural networks and biological motivated system have received a great deal of attention and are being touted one of the greatest computational tools. Many excitement results are due to the ability of neural networks to imitate the brain. Especially, the apparent ability to solve complex, noisy, nonlinear information processing problems that are difficult by other classical methods. It is true that neural information processing and brain science are closely integrated. The research areas on understanding brain, protecting brain and creating brain have pushed many scientists and experts in a variety of fields gathering on this annually meeting to share their ideas and new developments since 1994. It is also a great honor for China to hold the conference again in the famous and beautiful city, Shanghai.

We received over 300 submissions from more 31 countries and areas. With the help of renowned reviewers, the committee has selected 295 for oral and poster presentations. These papers with high scientific qualities, have covered brain model and cognitive science, learning algorithm, evolution and fuzzy system, neural network architecture, applications on image and signal processing, data mining, control, knowledge and rule extraction and others. Several leading scientists have been invited to give plenary presentation and forum talk on conference and sessions. Some of our colleagues help us to organize high-level mini-workshops and special sessions and some of our colleagues are also invited to chair the sessions. We deeply appreciate them for their kind support and help. We also give our thanks to the paper reviewers. We believed that each reviewer did his or her best to make objective decision though the review and decision process is never perfect. We apologize for any resulting disappointment.

Dear colleagues, on behalf of program committee, we would welcome you, the participants, to the ICONIP2001 and sincerely hope that conference successful!

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