

2nd International Conference on Hybrid Intelligent Systems (HIS'02) Special Session on Hybrid Intelligent Systems for Creative Behaviour

Session Chairs

Fabio Abbattista, Francesco Scagliola and Fabio Zambetta
fabio@di.uniba.it, fscagliola@libero.it, zambetta@di.uniba.it

Aim and Topics

The development of artificial systems exhibiting a creative behaviour, such as artistic and musical, is very fascinating and intriguing but very difficult to be achieved.

Creativity is considered a very human activity and very creative people have always been considered very intelligent or extraordinary people.

Traditional Artificial Intelligence (AI) approaches have coped with the problem of implementing computer software able to emulate human intelligence and human creativity. However, the achieved results are still unsatisfactory.

In the last decade, the new discipline of Soft Computing emerged and promised to overcome some of the limitations of traditional AI systems. Evolutionary Algorithms, Fuzzy Logic, Neural Networks, and more, have been used to realize artificial systems able to perform typical human tasks. The current research trend is to exploit Soft Computing techniques to model and emulate the main human capability: Creativity.

The main challenges seem to be: i) the definition of quality measures or criteria to select creative products (such as music or visual art) and, ii) the formalization of the creative process or, better to say, the definition of computational models for the spontaneous emergence of creative capability.

This session aims to present novel ideas, real applications, critique of existing work, and practical studies and experiments, which demonstrate how artificial systems, able to perform creative tasks, can be implemented by means of Soft Computing techniques.

Topics of interest for the session include, but are not restricted to, the application of Soft Computing technologies to:

- Creative systems for the generation of musical excerpts
- Creative systems for the generation of paintings and images
- Creative systems for the generation of architectural structures
- Creative systems for the generation of literary passages
- Computational models of creative behaviour
- Tools for the developments of creative systems
- Creative systems for kids
- Kansei Information Processing

Important dates

July, 25th 2002: Full Paper Submission

August, 7th 2002: Notification of acceptance

August, 25th 2002: Camera Ready Submission

Submission Details

Please submit a full paper of 8 to 10 pages (Letter or A4 paper) for oral presentation. The proceedings of the Conference will be published by IOS Press, Netherlands. A selected number of papers will also be considered for a special issue of the Elsevier Science Journal "Applied Soft Computing" and for a special issue of the IOS Press Journal- Intelligent Data Analysis. Please follow the author's guidelines given by IOS Press for more information on submission.

Author's guidelines can be downloaded from the conference web page (<http://his02.hybridsystem.com>).

Submissions should be sent, by e-mail, to the following address:

Fabio Abbattista
fabio@di.uniba.it