Announcements

ESANN'2007 – 15th European Symposium on Artificial Neural Networks Advances in Computational Intelligence and Learning

April 25–27, 2007. Bruges, Belgium.

ESANN'2007 is organized in collaboration with the UCL (Université catholique de Louvain, Louvain-la-Neuve) and the KULeuven (Katholiek Universiteit Leuven). The conference is technically co-sponsored by the International Neural Networks Society, the European Neural Networks Society, the IEEE Computational Intelligence Society, the IEEE Region 8, the IEEE Benelux Section (sponsors to be confirmed).

Scope and topics

Since its first happening in 1993, the European Symposium on Artificial Neural Networks has become the reference for researchers on fundamentals and theoretical aspects of artificial neural networks, computational intelligence, learning and related topics. Each year, around 100 specialists attend ESANN, in order to present their latest results and comprehensive surveys, and to discuss the future developments in this field.

The ESANN'2007 conference will follow this tradition, while adapting its scope to the new developments in the field. Artificial neural networks are viewed as a branch, or subdomain, of machine learning, statistical information processing and computational intelligence. Mathematical foundations, algorithms and tools, and applications are covered.

The following is a non-exhaustive list of machine learning, computational intelligence and artificial neural networks topics covered during the ESANN conferences:

THEORY and MODELS
Statistical and mathematical aspects of learning
Feedforward models
Kernel machines
Graphical models, EM and Bayesian learning
Vector quantization and self-organizing maps
Recurrent networks and dynamical systems
Blind signal processing
Ensemble learning
Nonlinear projection and data visualization
Fuzzy neural networks
Evolutionary computation
Bio-inspired systems

INFORMATION PROCESSING and APPLICATIONS
Data mining
Signal processing and modeling
Approximation and identification
Classification and clustering
Feature extraction and dimension reduction
Time series forecasting
Multimodal interfaces and multichannel processing

Adaptive control
Vision and sensory systems
Biometry
Bioinformatics
Brain-computer interfaces
Neuroinformatics

Papers will be presented orally (single track) and in poster sessions; all posters will be complemented by a short oral presentation during a plenary session. It is important to mention that the topics of a paper decide if it better fits into an oral or a poster session, not its quality. The selection of posters will be identical to oral presentations, and both will be printed in the same way in the proceedings. Nevertheless, authors must indicate their preference for oral or poster presentation when submitting their paper.

Special sessions

Special sessions will be organized by renowned scientists in their respective fields. Papers submitted to these sessions are reviewed according to the same rules as submissions to regular sessions. They must also follow the same format, instructions, deadlines and submission procedure.

The special sessions organized during ESANN'2007 are:

1) Fuzzy and Probabilistic Methods in Neural Networks and Machine Learning
   B. Hammer, Clausthal Univ. Tech. (Germany), T. Villmann, Univ. Leipzig (Germany)
2) Reinforcement Learning
   V. Heidrich-Meisner, Ruhr-Univ. Bochum, M. Lauer, Univ. Osnabrück, C. Igel, Ruhr-Univ. Bochum, M. Riedmiller, Univ. Karlsruhe (Germany)
3) Convex Optimization for the Design of Learning Machines
   K. Pelckmans, J.A.K. Suykens, Katholieke Univ. Leuven (Belgium)
4) Learning causality
   P. F. Verdes, Heidelberg Acad. of Sciences (Germany), K. Hlavackova-Schindler, Austrian Acad. of Sciences (Austria)
5) Reservoir Computing
   D. Verstraeten, B. Schrauwen, Univ. Gent (Belgium)

Call for contributions

Prospective authors are invited to submit their contributions before December 1, 2006. The electronic submission procedure is described on the ESANN portal http://www.dice.ucl.ac.be/esann/.

Conference secretariat

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EANN 2007 – 10th International Conference on Engineering Applications of Neural Networks

29−31 August 2007. Thessaloniki, Greece.

Since the first conference in 1995, the EANN conferences provide a great discussion forum on engineering applications of neural networks and artificial intelligence technologies.

The conference endeavours to promote more particularly the use of neural networks where significant benefits can be derived from their use. The conference is not only for reporting advances in neural network techniques, but also for showing that neural networks provide practical solutions in technical applications. Novel, innovative applications are appreciated.

Each time, about 80 engineers and researchers are invited to present a selection of papers. Papers are mainly presented orally and not more than 2 sessions are simultaneously held in order to offer a real discussion forum between all the participants. All the engineering fields are welcome and some special sessions, dedicated to these different fields, are organized.

Both theoretical and practical works should be submitted, but the authors are encouraged to focus their paper on the presentation of an application with real data experiments.

Authors are invited to submit electronically original, English-language research contributions or experience reports not concurrently submitted elsewhere. Papers should be no longer than 15 pages, 1.5 spaced, in no smaller than 10 point font with 1 inch margins (left, right, top, bottom.) The program committee may reject papers that exceed this length on the grounds of length alone. In the spirit of the previous EANN conferences, the paper should concentrate on the application rather than just the algorithm or the theory.

Submitted papers will be refereed by at least three reviewers for quality, correctness, originality, and relevance. Notification and reviews will be communicated via email. Accepted papers will be presented at the conference and included in the proceedings, which will be published by EANN and they will be available on site. It is important though to follow the instructions in this page to ensure that your paper will be included in the proceedings. Proposals for panels that examine emerging, innovative, or otherwise provocative issues within the conference area are encouraged as well. Panel proposals should include a 1−2 page summary of the topic and the names and affiliations of 3−4 panellists who have made a commitment to participate. A mix of industry and academic panel members is recommended.

Proposals for 90-minute tutorials are also invited on topics within the conference area. Tutorial proposals must be at most 5 pages, they must identify the intended audience, and they must give enough material to provide a sense of what will be covered.

A fully electronic review process is being planned. Technical papers and panel and tutorial proposals should be submitted electronically in postscript or pdf format by 26 March 2007, following the procedure described on the conference web page (http://skyblue.csd.auth.gr/eann2007/).

A paper may not be included in the proceedings if the requirements are not met, or if the registration fee is not received by the deadline of the submission of the camera-ready (18 June 2007). Based on the reviewers' comments and on the presentation, and after a second peer review process, a number of selected papers will be published in an extended version in a related scientific journal. (upon negotiation). In addition, presented papers will appear in the digital library CEUR (upon negotiation).

Suggested topics include, but are not limited to, the following:

Neural networks techniques: Learning theory; Evolutionary architectures; Support vectors machines; Unsupervised Learning; Reinforcement Learning; Adaptive architecture; Fuzzy logic and systems; Hybrid system; Hardware development; Low cost architectures.

Research areas: Computer vision; Pattern Recognition; Colour, Motion analysis; Signal Processing; Fusion; Telecommunications; Robotics – Intelligent Transportation Systems; Financial Forecasting; Time Series Analysis – Data mining; Adaptive Control; Modelling and identification; Prediction – Process Monitoring and Diagnosis.

Engineering Applications: Civil Engineering Applications – Biomedical Engineering Applications; Decision Making Applications – Manufacturing Engineering Applications; Computer science; Thermal Engineering – Financial Engineering; General Engineering Applications.

Selected papers will be considered for further publication in a special journal issue. Negotiations with major journals are in progress.

The call for papers is available at the URL http://skyblue.csd.auth.gr/eann2007/

Participants of EANN'2007 can combine their visit and attend/participate IEEE International Workshop on Machine Learning for Signal Processing.

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Paper submission deadline: March 26, 2007
Panel proposal submission: March 26, 2007
Notification of acceptance: May 7, 2007
Camera-ready copy: June 18, 2007
Conference dates: August 29−31, 2007