

Call for Papers

Workshop on

Artificial Intelligence in Designing Modern Decision Support Systems

at COMADEM 2010, June 28–July 2, 2010, NARA, JAPAN

Workshop Organiser:

Prof. Peter Funk, Sweden
Prof. Raj B. K. N. Rao, UK

Program committee:

To be announced shortly

Important Dates:

18th February, Paper Submission
31st March, Notification of paper acceptance
3rd May, Final Camera Ready Copy
28nd June - 2nd July Conference & Workshop

Topics of interest (but not limited to):

- Advanced Prediction methods
- Agent based systems
- Artificial intelligence methods and techniques
- Autonomous decision making systems
- Bayesian nets
- Case-Based Reasoning
- Constraint programming
- Expert systems
- Intelligent systems
- Intelligent, collaborative interacting system
- Learning and self improving systems
- Pattern matching and Neural nets
- Swarm intelligence

Local Organizing committee:

Peter Funk
Marcus Bengtsson
Erik Olsson
Ning Xiong

The First Workshop on *Artificial Intelligence in Designing Modern Decision Support Systems (AIDMDS'10)* will be held as part of the Comadem'10 conference in Nara, Japan. The aim of this interactive and multidisciplinary international workshop is to discuss new and innovative approaches employed in designing modern decision support systems using the artificial intelligence methods and techniques.

A number of researchers are currently engaged in exploring and exploiting new and innovative artificial intelligence methods and techniques in monitoring, diagnosing, prognosing and proactively maintaining, smart decision support systems based on reusing experiences. Engineers often say that when they are engaged on a task the second time it often takes 70% less time. There is a huge potential in cost benefits saving, reduction in costly and life-saving failures and disseminating new knowledge. Experienced staffs have learnt and understood how the performance of their 'healthy' machines behave based on their acoustics, vibrations, vision, smell and other sensory readings. This experience is often lost when staff changes. Research on the performance of hybrid systems based on artificial neural networks, case-based reasoning, Bayesian networks, pattern recognition techniques, etc have shown promising results in the efficient reuse of human experience and learning.

We invite papers in the area of *Artificial Intelligence in Designing Modern Decision Support Systems*. The workshop will focus on decision support, learning and self improving methods and techniques but we are also looking for diversity and invite multidisciplinary contributions with a bias towards Artificial Intelligence and in the context of condition monitoring and diagnostic engineering.

Submission and Contact Information

Short papers (2–4 pages, preferred size) or long papers (4–8 pages) should be submitted using the standard COMADEM submission procedure, but with an indication that this paper should be considered for the workshop. Submitted papers will be peer reviewed. Accepted papers will be included in the Congress Proceedings bearing an ISBN and distributed worldwide (only papers presented by the authors at the workshop will be included in the proceedings).

Further information about the workshop can be found:

www.idt.mdh.se/personal/pfk/comadem
www.comadem2010.jp/