Call for Papers

Special Issue of Applied Artificial Intelligence

Methods for Adaptive Intelligent Systems

Deadline: Oct 31, 2004 Publication: Summer 2005

Special issue editors: Georg Dorffner, Medical University of Vienna, and Austrian Research Institute for Artificial Intelligence Jon Garibaldi, University of Nottingham Davide Anguita, University of Genoa

Papers are solicited that deal with true adaptivity of models, such as

- Online adaptation to environmental changes
- Transfer of a solution to another similar one
- Systems learning on the task (growing knowledge)

in the areas of Neural computation, Machine learning, Fuzzy systems, Evolutionary computation and related fields. The focus of papers can be on new algorithm, tested on real data, or on case studies of real applications. In order to be suitable for the special issue, it is crucial to show that the algorithm cannot just be used for model estimation but also to adapt models during routine application. Special emphasis will be put on sound experimental validation of the methods used.

Examples of methods to be investigated are

- online variants of learning algorithms
- incremental learning
- learning on growing structures
- adaptivity in Bayesian learning

Possible application areas include

- time series forecasting
- industrial process modeling
- medical pattern recognition
- image processing
- etc.

Papers can be submitted until the deadline, October 31, 2004, electronically by email to georg@ai.univie.ac.at or by regular

<u>mail to</u>

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