Editorial

Dear Colleague:

Welcome to Volume 5(3) of the journal *Intelligent Data Analysis*!

This issue of IDA consists of five articles. Following are some highlights from each of these articles.

Tay and Cao, in the first article, investigate the use of saliency analysis (SA) and genetic algorithms (GA) in support vector machines (SVM) and discuss how these techniques can be used in the context of regression estimation. They demonstrate how, in simulated and real data sets, SA and GA can detect true feature sets from redundant feature sets. Their results show that both SA and GA are effective in SVM's for identifying important features. In the second article, Lu, Hu and Li discuss the problem of mining vertical weighted association rules from databases by extending the issue of mining weighted association rules and introducing the problem of mining mixed weighted association rules. They demonstrate that the algorithm introduced in their article has a better predictive ability than other related algorithms. In the next article, Andrade e Silva and Ludermir emphasize the need for using hybrid systems in a single framework to solve the problems of artificial intelligence and data analysis. They present a hybrid system to simplify rule sets obtained from rule induction algorithms without loosing the accuracy error. The assumption here was that simplicity can lead to more understandable models. Their results shows effective gains on a benchmark of sixteen data sets.

The fourth article by Rodriguez, Alonso and Bostrom present a supervised Classification method for time series. Their approach is based on boosting very simple classifiers that provide clauses with one literal in the body. They use two types of predicates: (i) relative predicates such as: "increases" and "stays" and (ii) region predicates, such as "always" and "sometimes". Their experiments on different data sets has shown that their approach is highly competitive with other approaches. Touahni, Sbihi and Idrissi, in the last article of this issue, introduce an approach based on neural network and mathematical morphology to detect mode boundaries in cluster analysis. Their approach is based on a data projection procedure which makes use of an auto-associative multi-layer neural network. The article includes applications of their work to evaluate clusters from a set of biometrical six-dimensional data.

And finally, the five articles in this issue of IDA come from many papers that were submitted to our journal. Our goal is to select the highest quality articles that are within the aims and scope of IDA. We would be happy to hear from you as what other topics we should focus on. Thanks again for your continuing support.

Best wishes,

A. Famili
Editor-in-Chief