

## Editorial

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Dear Colleague:

Welcome to Volume 5(6) of the journal *Intelligent Data Analysis*, the last issue of 2001!

Volume 5(6) of IDA consists of five articles. Following are some of the highlights of this issue of our journal.

In the first article, Esposito, Malerba and Marengo discuss the problem of handling both numerical and symbolic data sets, which are quite common in today's real world applications. They present an operator for the on-line discretization of a continuous and a flexible matching predicate. Their approach increases the sensitivity of a learner, including the errors of commission, without increasing errors of omission. In the second article, Kubat and Cooper explore ways of reducing the size of large data sets. They argue that instead of replacing the original data set with a carefully selected subset, one can develop a mechanism to create a number of subsets. They demonstrate that the cost of their subset selection procedure is linear in the size of the original training set. Muto and Hamamoto, in the next article, discuss the improvements to the generalization ability of Parzen classifiers. This is specially important since in high-dimensional space, the performance of these classifiers is degraded when the size of sample per class is unequal. They propose two techniques and show that these techniques are very effective in the performance of these classifiers. Zeng and Martinez, in the fourth article also emphasize on the quality of data for data analysis. They present an approach to correct mislabeled data. In their approach, a multi-layer neural networks is used as a basic framework where training patterns are assigned with a class probability vector to represent its difference from the output vector. Evaluating with a number of data sets, they have demonstrated that for most data sets with mislabeled data, their approach can achieve significantly higher accuracy. And finally, Felix and Baro in the last article, present the fuzzy temporal profile model for representation and recognition of patterns in real world applications. They emphasize on the fuzzy representation of the semantics associated with the linguistic description given by experts in pattern recognition tasks. Their research includes a set of algorithms that identify fuzzy temporal profiles.

In 2002, which we will be publishing volume 6 of our journal, we are planning to have a special issue dedicated to the Intelligent Data Analysis Conference (IDA-2001) that was held in Lisbon Portugal, September 13–15, 2001. We would be glad to hear from you about publishing reports from conferences, or special issues from other IDA related conferences. Thanks for your continuing support.

Best wishes,

A. Famili  
Editor-in-Chief