

Editorial

Dear Colleague:

Welcome to Volume 5(1) of the journal *Intelligent Data Analysis*!

Volume 5(1) of IDA consists of five articles which are in two groups. The first two articles have been selected as the best papers from the International Conference on Engineering Applications of Neural Networks (EANN), held in Warsaw (1999). The last three articles are the ones submitted to IDA journal.

Zufiria and Berzal, in the first article, discuss processing satellite data using neural networks for the purpose of meteorological nowcasting and short range forecasting. They identify that forecast characterization requires quantification of some additional parameters and this quantification has to rely on other tools such as linear regression. They propose a neural network model which is a combined Hebian neural nets with multilayer perceptron. The article includes evaluation of the proposed approach with real data. The second article by Valentin and Denoeux is also about the applications of neural networks in a complex physical process. It involves use of water treatment data to develop a software sensor for modeling the coagulation control process. One of the key features of this approach is its ability to take into account various sources of uncertainty in the data. The article include some interesting results with real data.

Aros, Chambrin and Pomorski propose a methodology for extracting local trends in time-series data. Their approach is based on an interpretation oriented visualization to derive contexts from time-series data and present trends in the form of symbols. The article includes some interesting results which consist of a rich visual interpretation and a framework the local symbolization of some time-series data. The next article by Wong, Lee and Wong presents a combined wavelet-neural networks model for extracting damping coefficients and modal frequency values from flight flutter data. The results shown in this work demonstrate that the proposed approach is more effective and accurate for parameter extraction. The last article of this issue, by Nguifo and Njiwoua, is about a machine learning system which combines lattice-based and instance based learning techniques. Their approach uses an entropy function to select relevant lattice nodes, then extracts a set of new numerical features from the original set of Boolean features. A nearest neighbor techniques is used as a similarity measure between redescribed instances. Their results indicate that the approach is able to achieve good classification accuracy in a variety of domains.

And finally, this issue represents our fifth year of success in publishing a high quality journal and our second year with IOS Press. We are continuously trying to attract more quality papers, review them on-time and deliver revised papers to our publisher. We appreciate the continuous support and feedback that we have received from our scientific community.

Best wishes,

A. Famili
Editor-in-Chief