

Editorial

Dear Colleague:

Welcome to volume 10(2) of *Intelligent Data Analysis* – An International Journal!

This issue of the IDA journal consists of five articles that cover a broad range of topics, all within the aims and scope of our journal. The first article is about association mining. Li and Kubat in this article introduce a new concept for identifying frequently occurring groups of items in transaction data bases. The proposed approach consists of a cost effective solution to the problem of discovering targeted itemsets. Their experimental results show that general and targeted itemsets can be identified and that itemset mining offers a highly desirable functionality. Srinivasa et al. in the second article propose a content based image retrieval approach that uses a neural network to deal with the non-linear combination of heterogeneous features. The system is self-adaptable to different applications and users. Evaluation of their system on a database of images with varied contents shows good results and a robust performance.

On the topic of resampling, an approach that is highly important to cluster validity, Möller and Radke present a method for evaluating resampling performance based on model simulations. Applying their method to the results of 40 cluster validity indices and one partition stability index, the authors conclude a ranking of different resampling techniques. Their results showed that perturbation was more effective than subsampling and both perturbation and subsampling clearly outperformed bootstrapping. Korkmaz et al, in the fourth article of this issue, discuss using genetic algorithms for clustering and present an encoding scheme that uses links to identify clusters in a partition. With the objective of minimizing total variation within clusters, their approach does not require the total number of clusters to be defined in advance. The approach proposed here obtains an optimal partition for all possible number of clusters and the results are compared with the output of other approaches. The last paper of this issue by Feldman et al explores a system to retrieve and classify certain class of financial information entries. The approach proposed in this article uses source documents to identify the reasons for the late filings and classifies them into specific categories. Their study indicates that a machine learning text categorization system can solve the problem and provide users with market information that they need.

And finally, in addition to the special issues of the IDA journal that we have planned for 2006 and 2007, we are looking for ideas on additional special issues dedicated to certain topics, such Intelligent Data Analysis in Bioinformatics. We welcome proposals on this and would be happy to work with colleagues on arranging special issues for the next two years.

With our best wishes,

Dr. A. Famili
Editor-in-Chief