

## Editorial

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Dear Colleague:

Welcome to volume 7(2) of the journal *Intelligent Data Analysis*!

This issue of IDA journal consists of five articles that mostly represent research that is related to data modeling through inducing and applying decision trees.

Findlater and Hamilton, in the first article of this issue, introduce a set of Iceberg-Cube algorithms to properly identify the combinations of values for a set of attributes for which a specified aggregation function yields values over a predefined aggregate threshold. This article includes results of implemented algorithms, a bottom-up and a top-down approach, and their performance using various data sets. The second article of this issue by Bruha and Tkadlec, is about rule quality for multiple-rule classifiers. Access to a quantitative measure for a set of rules obtained from any classifier becomes important when multiple rules are to be interpreted by human beings and possibly incorporated into the knowledge base of an expert system. The article contains a survey of some of the existing approaches and introduces a methodology for defining rule quality. The approach is evaluated using an induction algorithm. Geibel, Schadler and Wysotzki, in the third article, discuss the relationship between class discriminations and descriptions in relational learning. They introduce a combination of a relational decision tree algorithm and a connectionist approach which efficiently construct a relational decision tree and further construct class prototypes. The article also introduces steps taken to improve the understandability of results.

Similar to previous research, Pabarskaite and Long, in the fourth article discuss analysing web log data and introduce new methods to generate useful information from web data in order to improve web site's retention. The approach is based on predicting future actions and identifying sequential actions (e.g. pages visited) taken by the user. Several experiments that are part of this research and include some interesting results are reported in this article. In the last article of this issue, Laurent introduces a new architecture based on fuzzy multidimensional databases to generate fuzzy summaries. This approach has many applications in on-line analytical processing of real world data that require flexible queries. The article provides a comparison between this approach and some of the existing techniques and its usefulness in classical data and generation of fuzzy summaries.

And finally, we would like to bring to the attention of our readers the fifth Intelligent Data Analysis symposium that will be held in Berlin, Germany from August 28–30, 2003. Interested researchers can refer to the IDA-2003 website at ([www.ida2003.org](http://www.ida2003.org)) for more information. Like previous events, there will be a special issue of IDA journal in early 2004 that will be dedicated to the best papers of this symposium.

With best wishes,

Dr. A. Famili  
*Editor-in-Chief*