Statistical Data Analysis And Modeling Using Rapid Miner

Description:

Vast amounts of statistical information are available in today's global and economic environment because of continual improvements in computer technology. To compete successfully globally, managers and decision makers must be able to understand the information and use it effectively. Methods of data analysis are used in a wide variety of occupations and help people identify, study, and solve many complex problems.

Piles of data are collected and important knowledge is often hidden without anybody knowing. Statistical data analysis and modeling are the best methods to retrieve useful information and manage huge data.

Rapid Miner, written in the Java programming language **is the most comprehensive data mining solution** with respect to data integration, transformation, and modeling methods. It is an environment for machine learning, data mining, text mining, predictive analytics, and business analytics.

Rapid Miner is used for research, education, training, rapid prototyping, application development, and industrial applications. It uses learning schemes and attribute evaluators from theWeka machine learning environment and statistical modeling schemes from R-Project.

Using Rapid Miner, the following benefits can be achieved:

- Multi-layered data view concept ensures efficient data handling and provides powerful high-dimensional plotting facilities
- Powerful methods for calculating statistics and analyzing the significance of the results
- Data Integration, Analytical ETL, Data Analysis, and Reporting in one single suite
- Powerful but intuitive graphical user interface for the design of analysis processes
- Prediction or classification model building, automatic reporting and graphical representation of results
- Access to data sources like Excel, Access, Oracle, IBM DB2, Microsoft SQL, Sybase, Ingres, MySQL, Postgres, SPSS, dBase, Text files and more

Thus, a critical aspect of managing any organization is planning for the future. Using Rapid Miner, data can be analyzed to help managers forecast and predict future aspects of a business operation.

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