Chemistry Central Journal

Oral presentation

Explorative Data Analysis: from machine learning to discovery support systems

MR Berthold[1,2]

Address: [1]University of Konstanz, Germany and [2]KNIME.com GmbH, Switzerland

This abstract is available from: http://www.journal.chemistrycentral.com/content/3/S1/O5

Classic Data Analysis is based on the assumption that the type of models or patterns sought for – such as association rules or decision trees – is known in advance. In reality, however, users often do not have sufficient insights into the underlying system to be able to limit the choice of models appropriately before the data analysis process begins. Worse, still, the users often do not even know what types of patterns they would consider interesting.

Explorative Data Analysis addresses this concern by fostering a close interaction with the user, allowing her to continuously and quickly change model types and analysis focus throughout the data integration and analysis process.

In this talk I will present a number of explorative data analysis methods for life science related discovery tasks that have been developed within the KNIME Information Mining platform.