

Training session

Machine Learning – Decision trees

Discover the decision tree methods

Objectives

This training session on decision trees is intended for people wishing to:

- Learn the basics of decision trees from Machine Learning
- Analyze their own multivariate data at the end of the course
- Be autonomous to use the data analysis software studied

During the training, the method principles are introduced by a geometric approach. Emphasis is placed on the practical use of the method and the interpretation of the results.

Application exercises are proposed for each method. The training can be held on different Chemometrics / Machine Learning software: SPM® (Salford Systems - Minitab), MATLAB® from The MathWorks.

Information



Basics of data analysis (PCA, PLS) and univariate statistics are required



1 day



R&D, quality control, product development, process optimization, ...



In-house sessions



Instrumental data, physico-chemical data, process parameters, ...



Researchers, scientists and engineers



Agriculture / food, Petrochemical, Pharmaceutical, Biotechnology, Chemistry, Environment...

Program

CART - Classification And Regression Trees

- Theoretical principle of decision trees
- Optimization
- Limitations of CART models
 - ✓ Application on data set and software

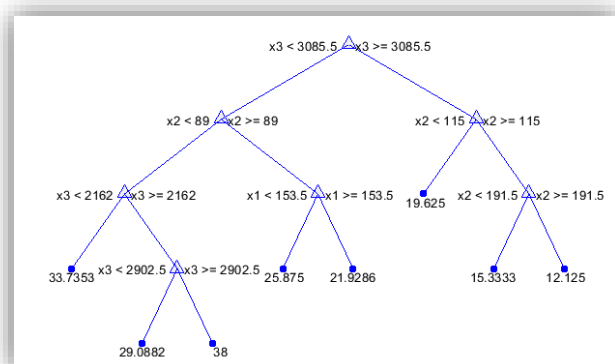


Random Forest

- Principle of the “ensemble methods”
- Optimization
 - ✓ Application on data set and software

Introduction to Boosting

- Discrimination
- Regression
 - ✓ Application on data set and software



In-house sessions

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