

## Workshop 2. Spotfire Advanced Training

### Duration

1 Day Workshop

### Objectives

Teaching students to extend their dashboards using:

- Advanced analytical concepts
  - Calculated columns and expressions within visualizations
  - Document properties, complex custom expressions
  - Advanced marking and filtering
- Built-in statistical tools for clustering, data relationships, and classification modelling
- Working with Enterprise Runtime for R
- Using the Advanced Data Canvas
- Analysing streaming data

### Description

This one-day workshop is designed to extend a student's expertise in using advanced analytical concepts and extending visual analytics with the built-in tools for advanced analysis and statistical analysis and modeling available in the Spotfire Analyst. Spotfire® Data Streams is used to showcase how to analyze streaming data in Spotfire®.

### Outcome

Students will leave the workshop with the tools necessary to build powerful analytical dashboards, perform data wrangling, and leverage Spotfire's built-in statistical tools to build models and identify unseen relationships within the data.

### Curriculum\*

1. Spotfire® Advanced Technologies
  - a. Expressions
    - i. Functions
    - ii. Expression Shortcuts
  - b. Advanced Properties Controls
    - i. Control Types
    - ii. Control types
    - iii. Referencing Properties
    - iv. Multi-select property controls and the "map" command.
    - v. Centralizing maintenance and reducing development time using document properties.
  - c. Advanced Data Canvas
  - d. Data Connections
  - e. Data on Demand
  - f. In-depth Marking and Filtering
2. Built-in Analytics Tool
  - a. Data Relationships
    - i. Numerical vs Numerical
    - ii. Numerical vs Categorical
    - iii. Categorical vs Categorical
  - b. Data Predictions
    - i. Regression Modelling
    - ii. Classification Modelling
  - c. Lines & Curves
  - d. Multivariate Data Analysis
    - i. Line Similarity
    - ii. K-Means Clustering
    - iii. Hierarchical Clustering
3. Introduction to R/TERR
  - a. Working with Data Functions
  - b. TERR Tools
  - c. Data Science Statistica Data Function
4. Streaming Visualizations
  - a. Connecting to Dynamic streams
  - b. Streaming data
  - c. Combining with static data

### Timing

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|-------|-----------|
| 09h00 | Session 1 |
| 10h30 | Break     |
| 11h00 | Session 2 |
| 12h30 | Lunch     |
| 13h15 | Session 3 |
| 14h45 | Break     |
| 15h00 | Session 4 |
| 16h30 | End       |