European Network for Business and Industrial Statistics

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All models are wrong –but which are useful?

Thursday, 1 October 2020 15:00 (2 hours)

You have a business or research question, you've collected or found appropriate data, and you are ready to analyze. But which analytical methods should you try? And how will you choose a final –hopefully the most useful –model? In this seminar, we will look at several data scenarios and discuss modeling options and a framework for comparison. We will look at how different questions or goals affect the modeling choices we make (Predict? Explain? Find associations?). Models covered will include traditional methods like (penalized) regression, structural equation modeling or tree-based models, as well as unsupervised and supervised machine-learning tools like clustering, neural networks or support vector machines. Comparison techniques will include residual analysis, comparing fit statistics and cross-validation.

In order to support interworking with other software, we will also cover (briefly) how to import data into JMP and how to export model scoring code (e.g. as C, Python or SAS code). We will also show options to share results and visualizations from the model building and assessment phases.

The format of this course will be a mix of conceptual presentations, live demos and hands-on. Attendees should have JMP Pro 15 pre-installed, free trial versions can be provided for Windows and Mac. No prior familiarity with JMP is required. All workshop content will be shared with the participants.

Presenter: KRAFT, Volker (SAS Institute GmbH –JMP Division, Germany)

Session Classification: Active Session