



DIGITAL SOLUTIONS

DATA SCIENCE AND MACHINE LEARNING

Course code: DI-02
Duration: 3 days

Prerequisite:

No previous knowledge in statistics is needed. Some Python experience will be if you want to use Jupyter Notebooks.

You will need a PC for the hands-on exercises.

DESCRIPTION

The first day of this 3-day classroom training gives an overview, while the next two days are hands-on. The course is suitable for anyone (engineers, programmers) interested in learning more about data science and machine learning and in gaining hands-on data science experience.

Day 1 of the course is lecture-based - no programming experience is required.

Topics covered are: business understanding (how to set up and start data science projects), a workflow for data science projects, data preparation, regression, classification, model evaluation, clustering and big data.

Days 2 and 3 go in-depth into the same topics, plus provide hands-on experience with common data science and machine learning tools: Orange ML, Jupyter Notebooks and scikit-learn. You can choose which tool to focus on, depending on Python skills.

ON COMPLETION OF THE COURSE YOU WILL HAVE

- Better understanding of what is meant by data science and machine learning, and their value
- Ideas about which types of problems in your own work are candidates for data science and machine learning
- Experience in using the tools to get started
- A basis for communicating in a meaningful way with others in the field
- An understanding of machine learning as an analytic approach and not as a 'magical black-box hype'
- Tips on some machine learning pitfalls to avoid
- Introduction to analytics tools available and familiarization with some of them

TARGET GROUP

The course is most suitable for those who work with data on a regular basis and would benefit from getting insights and motivation to what that data potentially could be used for. The first day of the course is useful also for non-technical staff of management looking for insight into machine learning.