CIEO SHORT COURSE
DATA ANALYTICS 2018

CIEO
Centro de Investigação sobre
o Espaço e as Organizações

UAlg FE
UNIVERSIDADE DO ALGARVE
FACULDADE DE ECONOMIA

Erasmus+

FCT
Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA E DA TECNOLOGIA

MARÇO 19 - 21

Faculdade de Economia | UAlg | *Campus* de Gambelas | Edifício 9 | Laboratório A

DATA ANALYTICS

Duração: 16 horas
Horário:
19th march: 9h-13h | 14h-18h
20th march: 14h-18h
21st march: 9h-13h
Inscrições: até 15 de março ou limitada até à capacidade da sala. A participação é gratuita mas a inscrição é obrigatória.

Formador:

Gernot Heisenberg, Faculty of Communication and Information Science, TH Köln

Objetivos:

Data science has become popular recently and more important, since large amounts of data are available and open up new opportunities for enhanced empirical sciences, planning and control, and targeted marketing and information services. Hence, data science and especially data analytics/data mining is an essential analytical tool for any company that collects, stores, processes and consumes data as part of its operations. Data mining is the extraction of implicit, previously unknown, and potentially useful information from data.

In this short course, trainees will learn how to utilize data science techniques for answering questions derived from real industrial use cases. The cases being used in this course are originated from the business administration and marketing field. Transferring the lessons learn and applying data mining techniques to another specific field of expertise will be easy once the trainees have understood the basics and the concepts.

Programa:

Day 1

Introduction to Data Analytics (terminology, concepts) [Basics]; Cross Industrial Standard Process for Data Mining (CRISP-DM) [Basics]; Introduction to RapidMiner and getting started [Basics]; Data Preparation for Analytics [Tutorial]; Pre-visualization with RapidMiner [Basics]; Classification [Basics]; Modelling the similarity of customer behaviour [Tutorial].

Day 2

Classification [RampUP]; Developing a system for credit approval analytics [Use Case]; Clustering [Basics]; Clustering (customer groups using k-means and hierarchical clustering [Tutorial]; Business Analytics in Microsoft Power BI. [Basics]; Data preparation in Power BI [Use Case]; Building an Analytics Dashboard with Power BI [Use Case].

Day 3

Association Rule Analytics [Basics]; Market basket analysis by finding association rules [Tutorial]; Conclusions.