

Summer School 2020, Module 3: Introduction to the world of Big Data & Analytics

Content:

In this course, we will dive deep into the world of Big Data. We will talk about the core characteristics of Big Data and where Big Data influences our everyday life. Topics to be discussed include an introduction to the tools and methods used to analyze Big Data, an overview of what can and can't be learned from Big Data, hot topics regarding Big Data ethics and privacy and the presentation of several Big Data use cases.

This module is designed for those who are relatively new to the world of Big Data and want to become conversant with the terminology and the core concepts of the Big Data world.

Learning outcomes:

You will not become a data scientist in a week, but at the end of this course, you will be able to understand the concept and range of big data analyses. You will gain expertise that will help you navigate through a data driven world.

You will:

- Take the first step to become data literate
- Understand what big data means, how it is defined and affects your daily life
- Gain insights into ethical consideration and data privacy issues concerning big data
- Learn the limits of what big data can tell us
- Receive an overview of big data analysis techniques
- Learn how to approach big data topics
- Learn the important vocabulary of the data science world
- Be able to identify strengths and weaknesses of big data analyses

Prerequisites:	A basic understanding of mathematics/statistics is helpful.
Contact hours:	30
ECTS:	3
Form of assessment:	Class Participation (40 %) Presentation (60 %)
Duration of module:	June 29 - July 3, 2020
Lecturer:	Dr. Ruben Bach, Georg-Christoph Haas
Language:	English
Range of application:	Graduate and advanced undergraduate students