Big Data and Artificial Intelligence

This course is about extracting useful knowledge from (big) data. It covers the fundamental principles or concepts that underlie data science & artificial intelligence with a main focus on the selection and application of techniques and the interpretation of results. We will study data analytics in a business context, i.e., we will mostly work with examples, case studies and data that are relevant for business. Upon completion of the class, students should be able to recognize the necessity of big data analysis, understand prerequisites and potential challenges as well as select and apply adequate methods and tools.

Teaching methods
- Seminar-teaching
- Project work
- Group work

Assessment methods
- Project work

Language of instruction
- English

Name of lecturer
- Prof. Dr. Eva Anderl

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Course content
- Importance of data analysis in the field of digital business
- Basic concepts and techniques of applied data science
  - Supervised and unsupervised learning
  - Classification
  - Regression / Prediction
  - Similarity and clustering
  - Time Series
  - Neural Networks
  - Overfitting and model evaluation

Remarks