Industrial Data Science

▶ Lecture and Exercises (2 + 2)
▶ Department of Statistics, Department of Computer Science, Department of Mechanical Engineering

▶ Course Content:

- Introduction, data and data analysis in industrial environments (Prof. Jochen Deuse)
- Data Management (Prof. Jens Teubner)
- Univariate statistics, correlation and regression, feature selection (Prof. Markus Pauly)
- Decision trees, random Forests, cluster analysis and topic modeling (Prof. Erich Schubert)
- Model selection (Prof. Markus Pauly)
- SVMs and neuronal networks (Prof. Erich Schubert)
Suitable modules: MS 6,7, MD Applications, MS VI, VII, MD IX, X (5 ECTS points)

Dates:
- Lecture: Friday 08:15-09:45 am, Seminarraumgebäude 1- H001
- Exercises: Friday 10:15-11:45 am, same room

Language: English

Prerequisites: Basic knowledge in math and programming

Registration: Via moodle

Follow-up course: Industrial Data Science 2 in which the learned material can be practically applied to real industrial use cases. Can be credited for master of data science students as MD Applications (5 ECTS).

The prerequisites will be explained in the first INDAS 1 lecture.