

- ▶ **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)

# Industrial Data Science

- ▶ **Suitable modules:** MS 6,7, MD Methods, MS VI, VII, MD IX, X (4,5 ECTS points)
- ▶ **Dates:**
  - ▶ Lecture: Friday 08:15-09:45 am
  - ▶ Exercises: Friday 10:15-11:45 am
- ▶ **Language:** English
- ▶ **Prerequisites:** Basic knowledge in math and programming
- ▶ **Homepage:**  
<https://www.statistik.tu-dortmund.de/?id=3034>

**Follow-up course:** Industrial Data Science 2 which can be credited as a Seminar or with additional effort as Case Studies 2. The prerequisites will be explained in the first INDAS 1 lecture.