

# Online Vorlesung

## Data Science SS20

*Janis Keuper*





- Introduction
- Course layout
- Course dates
- Exam
- Lab Exercises
- Things to do ...

## Prof. Dr.-Ing Janis Keuper



- MARKANT endowed research professor for “Data Science and Analytic
- Head of the “Institute for Machine Learning and Analytics“



INSTITUTE FOR MACHINE  
LEARNING AND ANALYTICS

## Professional experience



- Diploma in Computer Science Uni Freiburg
- PhD in Machine Learning / Computer Vision Uni Freiburg
- Visiting Researcher Uni Oulu (Finland)
- PostDoc Uni Heidelberg
- Group Leader Intel Research
- Group Leader Fraunhofer ITWM
- Scientific/Development Lead for many public and industry research projects

## Scientific Interests



- Large scale machine learning (on HPC and Cloud)
  - Building systems and tool
  - ML Hardware
  - Optimization algorithms
- Big Data analysis
- Deep Learning Methods
- Generative Models

## Contact



- [janis.keuper@hs-offenburg.de](mailto:janis.keuper@hs-offenburg.de)
- **Please use anonymous Moodle forums!**



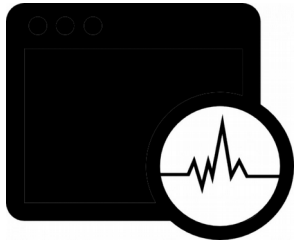
## **Planned: 8 Blocks – each with 4 modules**

- *Every Wednesday*
  - Theory (lecture) [video recording]
  - Case Study (lecture) [video recording]
- *Every Friday 2-4pm*
  - Python Tools (lab) [Live Q+A]
  - Python Project (lab) [Live Q+A]



- No exam! → replaced by project work





- Lab exercises + home work
  - Mandatory !
  - hand in solutions till the end of the semester



Jake VanderPlas: Data Science mit Python: Das Handbuch für den Einsatz von IPython, Jupyter, NumPy, Pandas, Matplotlib und Scikit-Learn



Joel Grus: Einführung in Data Science: Grundprinzipien der Datenanalyse mit Python



Sebastian Raschka: Machine Learning mit Python  
und Scikit-Learn und tensorflow



**Non of the books cover this  
course completely, it is NOT  
mandatory to have any of  
them.**

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