



### What you will learn in this course

#### Content

- What is Artificial Intelligence (AI), use cases and applications of AI
- Al concepts and terms like machine learning and deep learning
- Broad-ranging discussion: key subdisciplines within AI, algorithms, applications
- Al frameworks for machine learning und possible applications
- Hands-on coding in Python / (Jupyter-)Notebook-based environment.

### Prerequisites

- An open, inquisitive and curious mind
- Basic object-oriented coding skills (preferably basic Python knowledge)

#### Our Goal

Students leave excited about the numerous applications and huge possibilities in the field of AI, which continues to expand human capability beyond our imagination!











Prof. Dr. Markus Breunig

BrM

Prof. Dr. Kai Höfig

HoKa

Prof. Dr. Jochen Schmidt

SJ

Prof. Dr. Marcel Tilly

TiMa



## Timeline (subject to change)

- 4 SWS / Week
- Wednesdays17:15 20:30
- Some lectures: flipped classroom

Some homework to be prepared <a href="https://example.com/before">before</a> (!!!) the class

 Draft-Schedule – subject to change

Date	Subject	Lecturer(s)
16.03.2021	Introduction	TiMa
23.03.2021	Basic Classification	НоКа
30.03.2021	Decision Tree Classification	НоКа
13.04.2021	Classifier Evaluation	НоКа
20.04.2021	Artificial Neural Networks	НоКа
27.04.2021	Data Science	НоКа
04.05.2021	Natural Language Processing	TiMa
11.05.2021	Language Understanding and Speech Recognition as a Service	TiMa
18.05.2021	Basic Image Processing	SJ
01.06.2021	SVM-based image recognition	SJ
08.06.2021	Convolutional Neural Networks	SJ
15.06.2021	Vision as a Service	TiMa
22.06.2021	Al applications	TiMa
29.06.2021	Recap und Questions	HoKa+TiMa
06.07.2021	Oral or Written Exams (if possible)	all



## Oral Examination (in case)

- Oral Examination
- One student one/two/three/four lecturers (random assignment)
- 15min
- Dates and Timeframes will be announced via OSC (6.7.2021 and more)
- Signup for individual slots will be done in class/via LC
  Final examination schedule will be published via LC



# Written Examination (in case)

• 60min-75min

Date: 06.07.2021

Timeframe: 13:45-17:00

Signup for individual slots will be done in class/via LC
 Final examination schedule will be published via LC

