

Modul - Introduction to AI - part II (AI2)

Bachelor Programme AAI

00 - Introduction

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Organizational things

- Lecture
 - **Monday, 09:45 - 11:15**
 - The lecture will be delivered as announced in the schedule.
- Exercises: Monday, 11:45-13:15 (**G1**) and 13:45-15:15 (**G2**)
 - No exercises today!
- Communication: via Discord (#ai2 in AAI)

Certificate of achievement



- 2 + 2 SWS
- Written exam
- Duration: 90 minutes
- When? - at the end of the semester
- Registration via OSC
- Credit points: 5 CP



Goals (formal)



- Students know about problem domains, applications and foundations of artificial intelligence.
- Students know and understand the theoretical and algorithmic foundations of knowledge representation and reasoning, problem solving, and AI in general.
- Students learn to implement solutions for specific problems with Python.
- Students can analyze difficult subject-specific problems in a scientifically sound manner and understand complex interrelationships and implement them in software by selecting suitable methods.
- Students can evaluate and discuss ethical and social implications of their work in scope of AI.



Goals (unofficial)

Students of AAI should definitely be able to ...

- ... write code in Python
- ... know about AI, ML and Deep Learning
- ... understand ANN, NLP and Computer Vision
- ... use various approaches on AI challenges



Syllabus (planned!)

- 21.03.2022 Introduction
- 28.03.2022 Basic Classification
- 04.04.2022 Decision Tree Classification
- 11.04.2022 Classifier Evaluation
- 25.04.2022 Perception and Perceptron
- 02.05.2022 Artificial Neural Networks
- 09.05.2022 Natural Language Processing 1
- 16.05.2022 Natural Language Processing 2
- 23.05.2022 Computer Vision
- 30.05.2022 Knowledge representation
- 13.06.2022 Ontologies
- 20.06.2022 Automated Planning
- 27.06.2022 Uncertain knowledge/ Expert systems
- 04.07.2022 Recap und Questions