

Machine Learning

Exercise Sheet 8

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Exercise 1: Maschine Learning and Data-Mining

As explained in the introductory lecture, machine learning is applied in many areas.

a)

Name and describe two additional applications (except which, that in the lecture introduced) in which machine learning can be applied.

b)

State advantages and disadvantages that arise through the application of machine learning. Under which conditions would it be worthwhile to apply methods of the machine learning?

c)

Describe the phases of the CRISP-DM in your own words, state the phases that are independent of the actual application.

Aufgabe 2

With machine learning, different problems can be solved. One distinguishes different methods, such as supervised learning, unsupervised learning, reinforcement learning etc.

a)

Allot the applications that were introduced in the lecture (recommendation systems, bioinformatics, robotics) to the suitable methods (regression, classification, unsupervised learning...).

b)

State two examples in which supervised or unsupervised learning can be applied, respectively.

c)

Discuss the differences between supervised and unsupervised learning.