

Machine Learning

Course Work 6

to complete by: 08.12.2016

This is our last exercise sheet before entering the project phase. It will give you opportunity to catch up on the last exercises and read into your project.

Do Exercise 6.2 or 6.3, depending on which project you choose. Calculate a whole day for literature work and collecting questions!

Exercise 6.1 (Catching Up)

Complete all previous assignments that you have not been able to finish so far. Include short presentations (we will discuss them in the next “Praktikum”).

Exercise 6.2 (Preparation for “Gaze Trackers”)

Read the paper “Appearance-Based Gaze Estimation in the Wild” by Zhang and colleagues. The dataset mentioned here may be interesting for your project.

- In particular, cover Section 5 (“Approach”) thoroughly. Try hard to fully understand the single processing steps (it may be tricky).
- Write down your open questions for a discussion next week.

Exercise 6.3 (Preparation for “Wikifiers”)

Read the paper “Learning to Link with Wikipedia” by Milne and Whitten. You might have noticed that videos in AMIGO are already being linked with Wikipedia. This is done with the method described in the paper.

- In particular, cover Sections 3.1 (“A Learning Approach to Disambiguation”) and 4.1 (“A Machine-learning Link Detector”) thoroughly. Try hard to fully understand the single processing steps (it may be tricky).
- Write down your open questions for a discussion next week.

Exercise 6.4 (Project Plan)

Put together a preliminary project plan in a short presentation.

- Sketch the outcome of your project: What features will your final demo include? How will your system be trained, how will it be tested?
- To achieve this: (1) What data will you have to acquire? (2) What knowledge/expertise will you have to acquire? (3) What ML components and what frontend components are required?

- Sketch a preliminary time plan: **Who** will do **what** in which week?

Remarks: (1) Try to be as specific as possible, even if it is hard. (2) Aim high: If an ambitious plan fails, this will not be held against you!