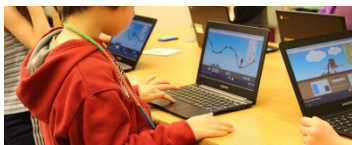
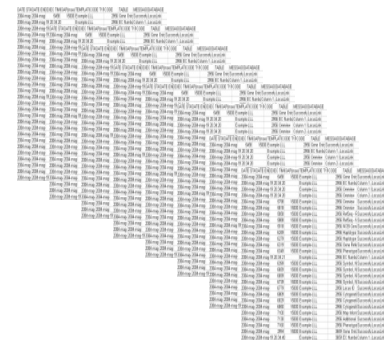


The background of the slide is an aerial photograph of the EPFL campus in Lausanne, Switzerland. The image shows a large body of water (Lake Geneva) in the background, with the city of Lausanne and the EPFL campus buildings in the foreground. The sky is blue with some white clouds.

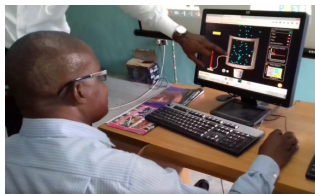
KI in der Berufs- bildung

Prof. Tanja Käser
ML4ED Laboratory
EPFL

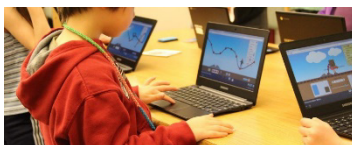
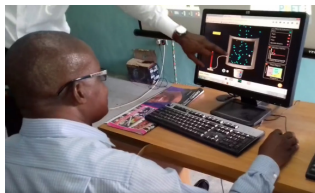
November 2023



- Strategien
- Präferenzen
- Lernkompetenzen



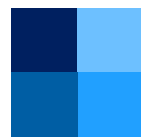
- Aufgabe auswählen
- Feedback geben
- Hilfe anbieten



coursera
udemy
edX

Future
Learn
UDACITY

Modelle
Wissen
Lernen
Verhalten

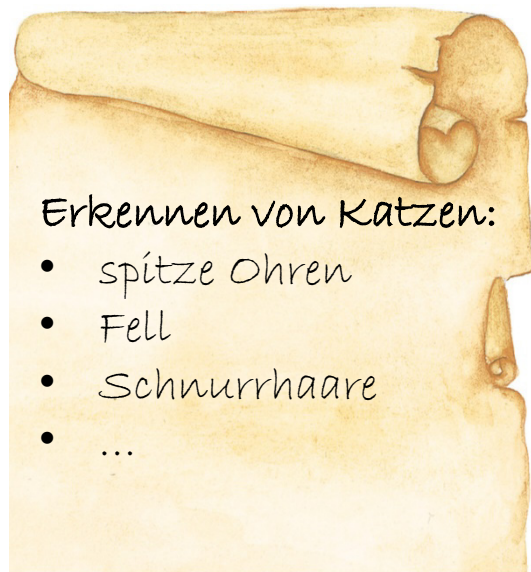


- Strategien
- Präferenzen
- Lernkompetenzen

Learning Analytics Data (LAD) - A collection of data points representing learning activities and outcomes. The data is organized into a table with columns for various attributes and rows for individual learners. The table is rotated 90 degrees clockwise.

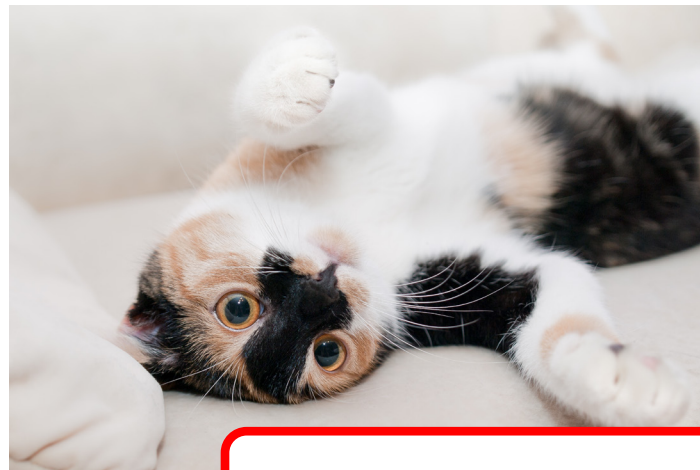
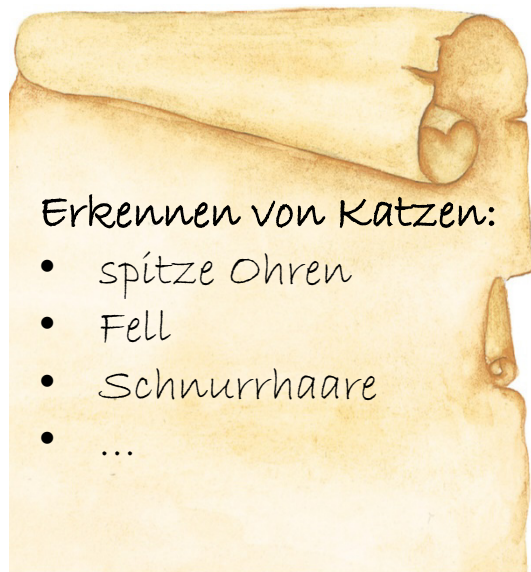
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■ Rezept (Programm) mit Regeln



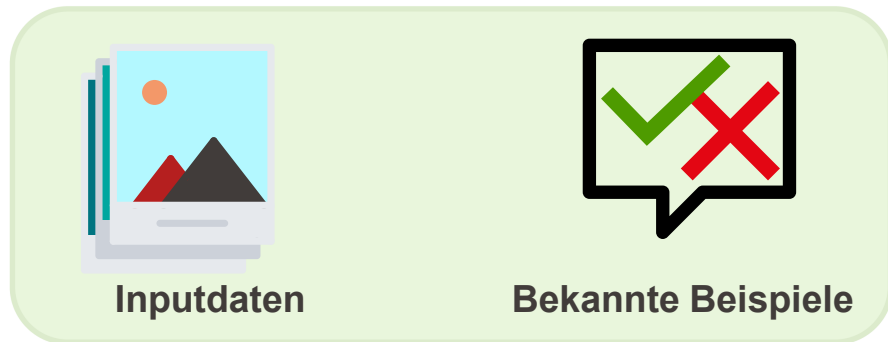
Das ist eine Katze!

■ Rezept (Programm) mit Regeln

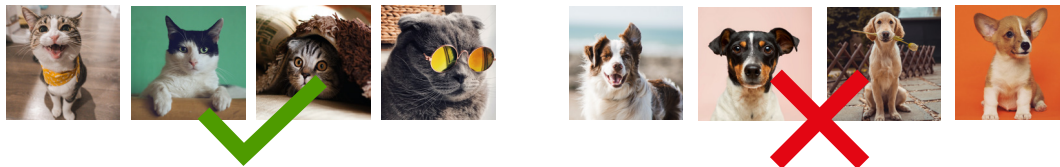


Das ist keine Katze!

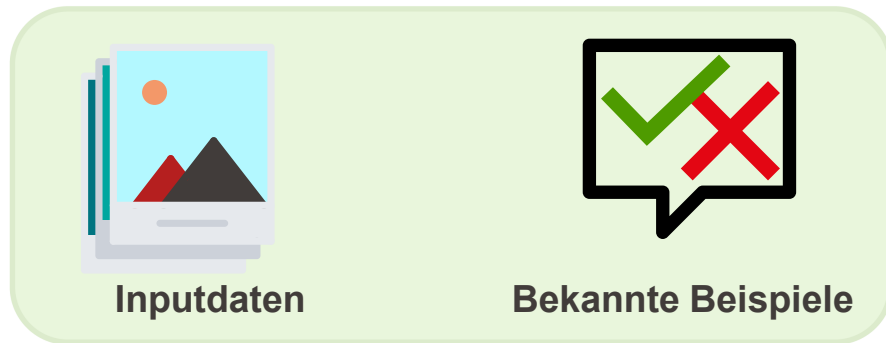
- Wir geben dem Computer Daten und Beispiele



Was wir dem Computer geben



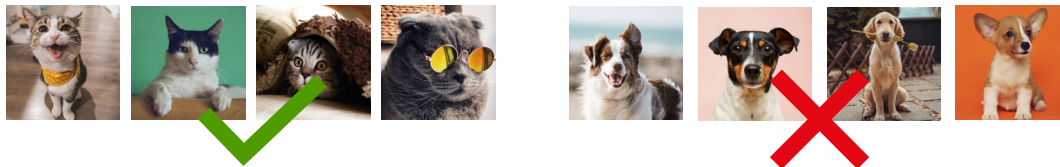
- Wir geben dem Computer Daten und Beispiele



Die Arbeit des Computers:

Ein Modell lernen, das die Anwendung von Regeln simuliert

Was wir dem Computer geben



- Sprachmodelle lesen eine *riesige* Menge Text im Internet
- Durch das Lesen im Internet:
 - lernt das Modell Informationen über die Welt
 - Die EPFL befindet sich in der Schweiz
 - beobachtet das Modell menschliche «Aufgaben»
 - einen Text zusammenfassen
 - einen Satz übersetzen
 - eine Frage beantworten
- Resultat: das Modell speichert diese Informationen und lernt Prozeduren an Texten durchzuführen
-

- Sprachmodelle sagen das *plausibelste* Wort voraus, das einer Sequenz von Wörtern folgt:

Tanja Käser hält einen Vortrag _____

Tanja Käser hält einen Vortrag an _____

Tanja Käser hält einen Vortrag an der _____

Tanja Käser hält einen Vortrag an der Herbsttagung _____

Tanja Käser hält einen Vortrag an der Herbsttagung 2023

- Das Sprachmodell hat **kein** Wissen von richtig und falsch.

▪

RELEX - Recipe Learning through Examples

A simple tool to help you improve your recipe writing skills.



Text Editor

Write your recipe here, then, click on the "Analyze" button to receive personalized tips shown in an example recipe.

Dear friend, I suggest you to cook my grandmother's signature dish. You must first cut the chicken in small pieces. Then, heat water in a pot and add the chicken and pepper. Next, add some olives and mushrooms. Then, prepare a sauce on the side with vinegar and oil. Remove the chicken from the fire, remove the water and add the sauce. Add salt to taste!

Analyze

Save and Reset

Help

Personal Dashboard

This dashboard shows a recipe chosen based on your text, exemplifying some improvements you can make. [Details](#)

Tips on Structure

Write the ingredients and the steps in separate sections.

List each ingredient separately.

Enumerate the steps.

Title: Louisiana Chicken

Ingredients:

- 1 broiler-fryer chicken, about 2 1/2 to 3 lbs
- 1/2 teaspoon salt
- 1/2 teaspoon ground cayenne pepper (cayenne)
- 1/2 cup vegetable oil
- 4 tablespoons butter
- 3/4 lb fresh mushrooms, trimmed and finely chopped (about 4 cups)
- 1/4 cup flour
- 2 cups chicken stock
- 1/4 cup pitted green olives, thinly sliced

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Tips on the Specificity of Ingredients

Indicate the form of olives.

Indicate the type of pepper.

Tips on the Specificity of Steps

Specify the intensity of cooking heat.

be more specific.

Tips for Clarity of Steps

Describe how a mixture should look or feel at a certain stage.

Describe until when to do the actions.

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frequently with tongs for about 20 minutes, or until they brown richly and evenly.
3. To be sure that the bird is cooked to the proper degree of doneness, lift a thigh from the pan and pierce it deeply with the point of a small skewer or sharp knife. The juice that trickles out should be clear yellow; if it is still tinged with pink, fry the chicken for 2 or 3 minutes more.

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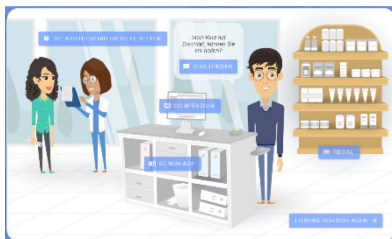
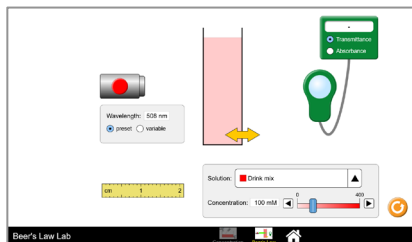
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One of the best-known Campania dishes in Italy and abroad are undoubtedly the *gnocchetti alla sorrentina*, truly prepared in all restaurants around the world, the recipe for these *gnocchetti* is also one of the most popular first courses on the Internet.

The simplicity and speed of preparation will combine with the splendid effect they will have on your guests, who will be able to enjoy all the flavor of fresh tomato sauce, combined with the freshness of mozzarella and the scent of basil. Ingredients that make this dish a worthy ambassador of the Mediterranean diet in the world. And if you have no way to find fresh tomatoes, you can opt for a puree or peeled tomatoes, they will be equally delicious!

Preparation: 40 min • Cooking: 10 min
#Spaghetti (2 ingredients)

Interessiert?

- Lernen mit Simulationen: virtuelles Labor (Chemie, Physik)
- Problem-basiertes Lernen: virtuelle Apotheke
- Lernen durch Beispiele: RELEX - Rezepte

Kontakt: peter.buhlmann@epfl.ch

Homepage: ml4ed.epfl.ch