

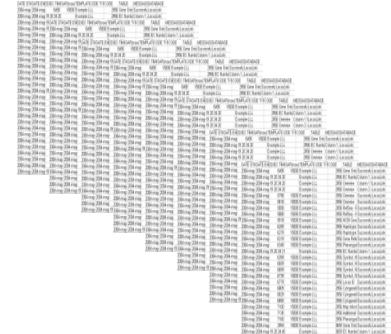


KI in der Berufs- bildung

Prof. Tanja Käser
ML4ED Laboratory
EPFL



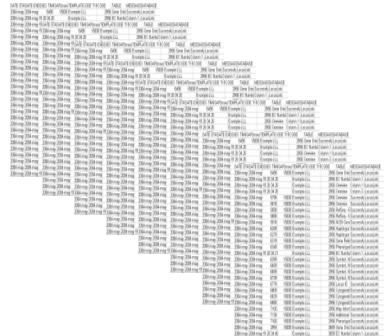
KI – Lernen verstehen und unterstützen



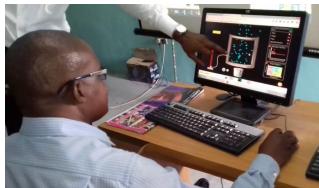
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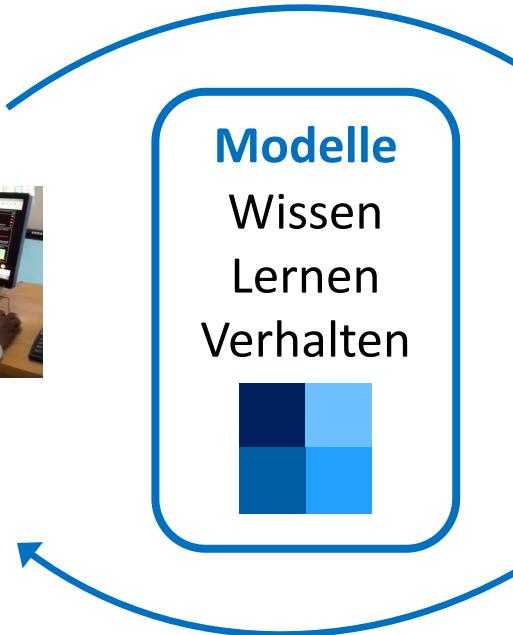
- Strategien
- Präferenzen
- Lernkompetenzen



- Aufgabe auswählen
- Feedback geben
- Hilfe anbieten



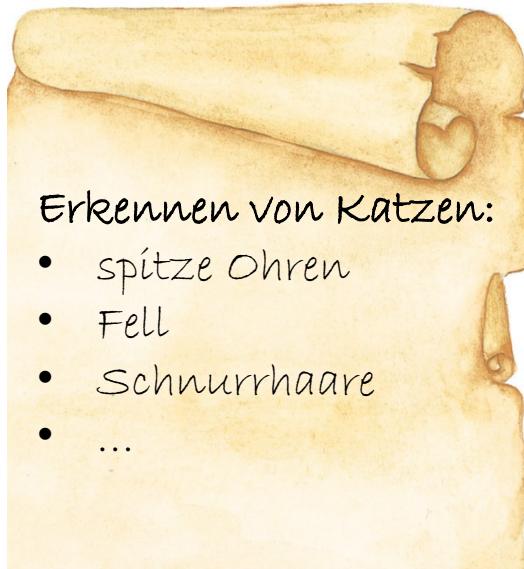
The image displays five educational platform logos in a horizontal row. From left to right: Coursera (blue text), Udemy (green text), Future Learn (pink text with a black step icon), edX (blue text), and Udacity (black text with a large yellow 'U' icon).



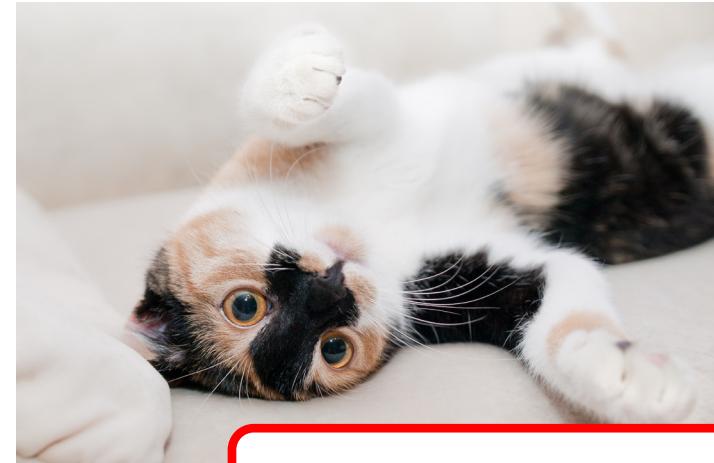
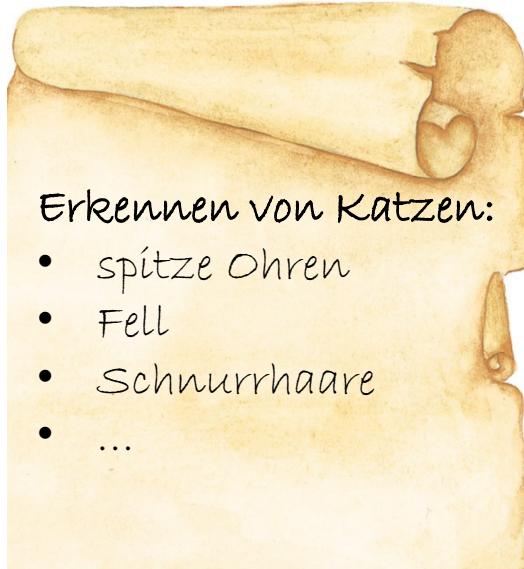
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- Rezept (Programm) mit Regeln

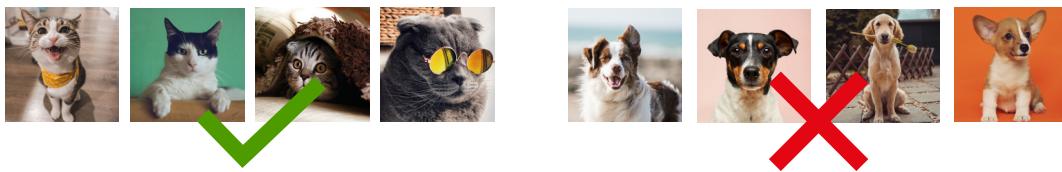
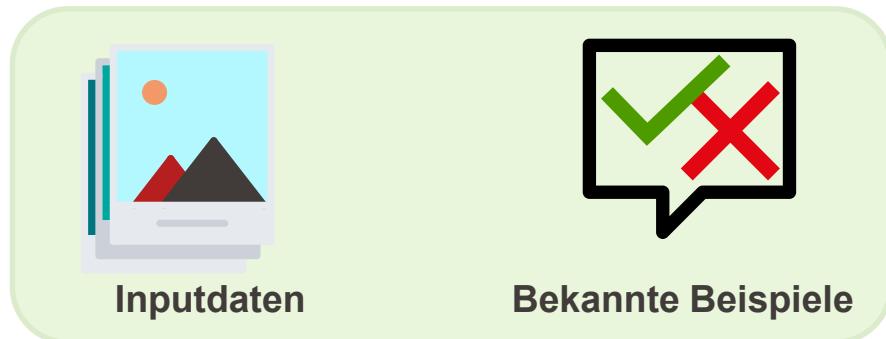


- Rezept (Programm) mit Regeln

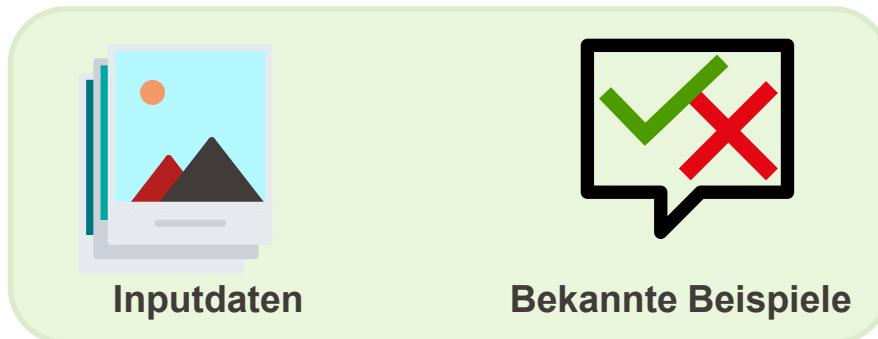


Das ist keine Katze!

- Wir geben dem Computer Daten und Beispiele



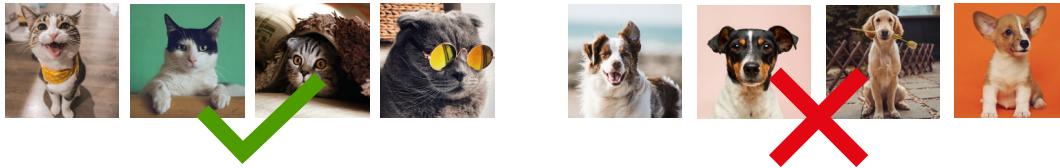
- Wir geben dem Computer Daten und Beispiele



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!

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

Analyze Save and Reset Help

RELEX – Rezepte schreiben

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Analyze

Save and Reset

Help

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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.

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.

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.

Reflection Space

On the right, you are seeing a recipe from another user. Please compare and reflect on your recipe by answering the following questions.

1) What aspects of this example recipe do you find interesting, useful, convincing, and which not?

The different sections for ingredients and steps as well as listing the ingredients and enumerating the steps, it is easy to read!

2) What deficiencies does your recipe have compared to the example recipe on the right?

I was not very specific with the type of the ingredients and I can improve the structure.

Save

Text Editor

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

Add some chicken, olives and pepper in a pan. Then, serve when it is ready!

Analyze

Save and Reset

Help

Personal Dashboard

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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.

Title: Louisiana Chicken

Ingredients:

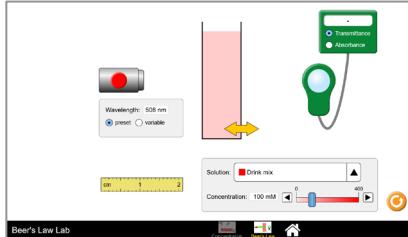
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PharmaSim – Virtuelle Apotheke





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