

KREATIVITÄT TRIFFT KI

Lernen mit Künstlicher Intelligenz


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How-Old.net

How old do I look? #HowOldRobot

Search Faces...

[➔ Use this photo](#)

 [Use your own photo](#)



P.S. We don't keep the photo

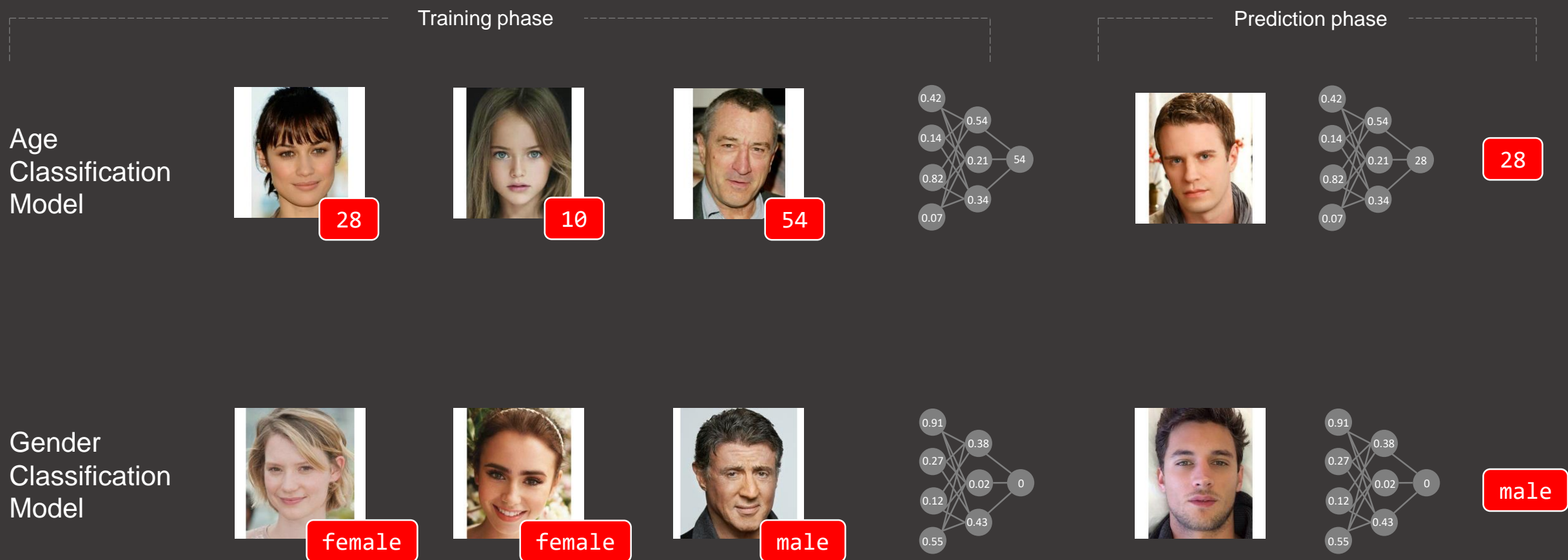
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The magic behind How-Old.net

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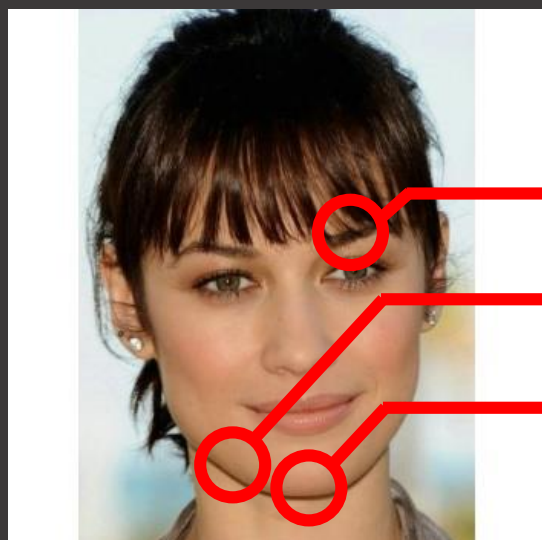
How does a computer see pictures?

DEEP LEARNING TRAINING & SCORING



How does a computer see pictures?

FACE ATTRIBUTES & FEATURES



Top gender features

Eyebrows

Round chin

Light chin

Top age features:

Earlobes

Wrinkles

Longer nose

How does a computer see pictures?

WHICH FACE IS REAL?



<http://www.whichfaceisreal.com/>

The magic behind image creation

GENERATIVE ADVERSARIAL NETWORKS



MICROSOFT COGNITIVE SERVICES

← → ↻ 🏠 🔒 https://azure.microsoft.com/en-us/services/cognitive-services/face/ 📄 ☆ 📌 📄 ⋮

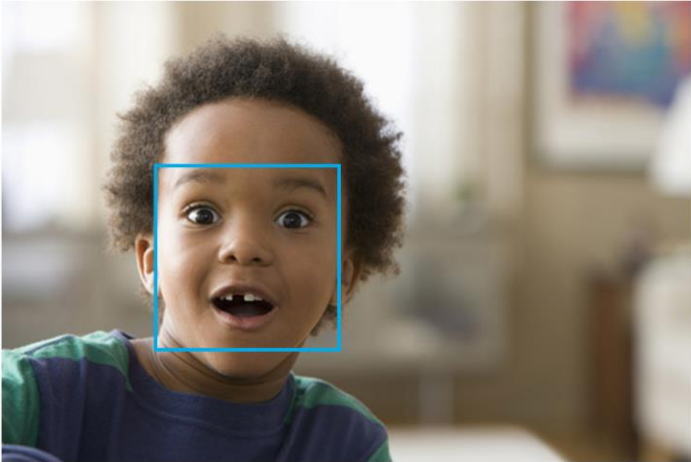
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Emotion recognition

The Face API now integrates emotion recognition, returning the confidence across a set of emotions for each face in the image such as anger, contempt, disgust, fear, happiness, neutral, sadness, and surprise. These emotions are understood to be cross-culturally and universally communicated with particular facial expressions.

See it in action



```
Detection result:
1 faces detected

JSON:
[
  {
    "faceRectangle": {
      "top": 141,
      "left": 130,
      "width": 162,
      "height": 162
    },
    "scores": {
      "anger": 9.29041E-06,
      "contempt": 0.000118981574,
      "disgust": 3.15619363E-05,
      "fear": 0.000589638,
      "happiness": 0.06630674,
      "neutral": 0.00555004273,
      "sadness": 7.44669524E-06,
      "surprise": 0.9273863
    }
  }
]
```

Image URL

CoderDojo

SELFIE BOT



Open Source Project

SELFIE BOT



https://github.com/coderdojo-wien/exercises/tree/dev/nodejs/Selfie_Bot

The screenshot shows the GitHub repository page for 'Selfie-Bot' by 'coderdojo-wien'. The repository is located at 'exercises / nodejs / Selfie_Bot /'. It has 7 watchers, 1 star, and 8 forks. The latest commit is by 'christian-vorhemus' on 19 Feb 2018. The repository contains a 'src' directory and a 'Readme.md' file. The 'Readme.md' file contains the following text:

Selfie-Bot

Dieser Bot wurde mit [Microsoft Botbuilder SDK v4](#) in Node.js geschrieben. Er nimmt ein Bild/Selfie entgegen und ruft [Microsoft Cognitive Services \(Face API\)](#) auf um das Bild zu analysieren hinsichtlich Geschlecht, Alter, Lächeln und Brille.

The screenshot also shows a chat window for 'Selfie-Bot' with a message: 'Sende mir bitte ein Bild.' and a response: 'Du bist wahrscheinlich ein ...'.

KETTENBRIEFE BOT

Hallo ich bin Momo und bin vor 3 Jahren verstorben ich wurde von einem Auto angefahren und wenn du nicht möchtest das ich heute Abend um 00:00 Uhr in deinem Zimmer stehe und dir beim schlafen zuschaue dann sende diese Nachricht an 15 Kontakte weiter

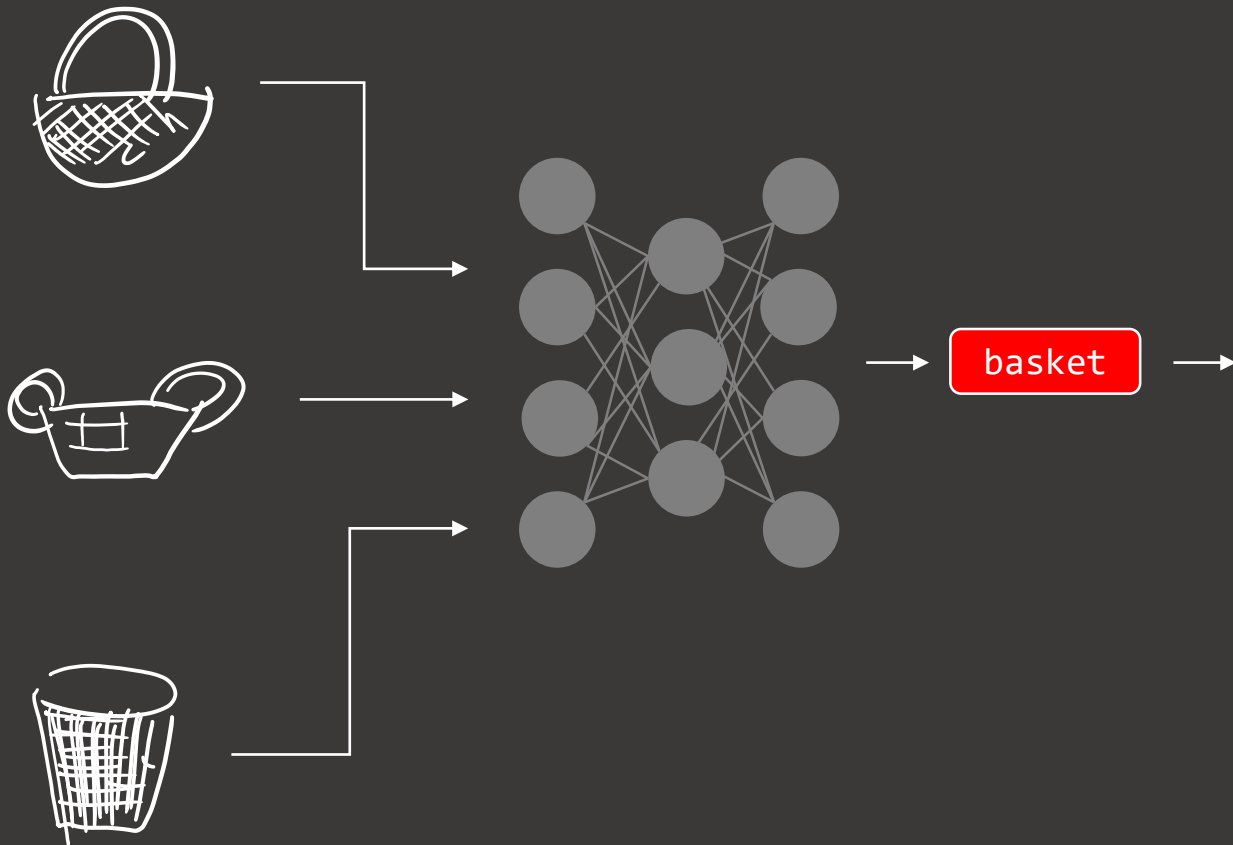
Hee bist du ein mensch haha

warnung! die killerclowns werden eine nacht vor halloween herum gehen schicke es sofort weiter es ist sehr wichtig! haltet eure fenster und türen verriegelt und haustiere im haus!!!!!!!!!!

Can you write stories together with a computer?



DREAM DRAW



ConceptNet
An open, multilingual knowledge graph

Documentation FAQ Chat Blog

Search for a word or phrase English Search

What is ConceptNet?

ConceptNet is a freely-available semantic network, designed to help computers understand the meanings of words that people use.

ConceptNet originated from the crowdsourcing project Open Mind Common Sense, which was launched in 1999 at the MIT Media Lab. It has since grown to include knowledge from other crowdsourced resources, expert-created resources, and games with a purpose.

Examples

To explore what's in ConceptNet, try browsing what it knows about any of these terms:

- word
- mot
- woord
- palabra
- palavra
- 単語
- graph
- knowledge
- learn
- natural language
- semantic network
- Marvin Minsky

Word vectors and recent publications

ConceptNet is used to create word embeddings -- representations of word meanings as vectors, similar to word2vec, GloVe, or fastText, but better.

These word embeddings are free, multilingual, aligned across languages, and designed to avoid representing harmful stereotypes. Their performance at word similarity, within and across languages, was shown to be state of the art at SemEval 2017.

The process for learning these word vectors is described in our AAAI 2017 paper, which also shows state-of-the-art results on solving analogy problems.

Support and discussion

chat get help

Question Answer System

WIKIANSWERS



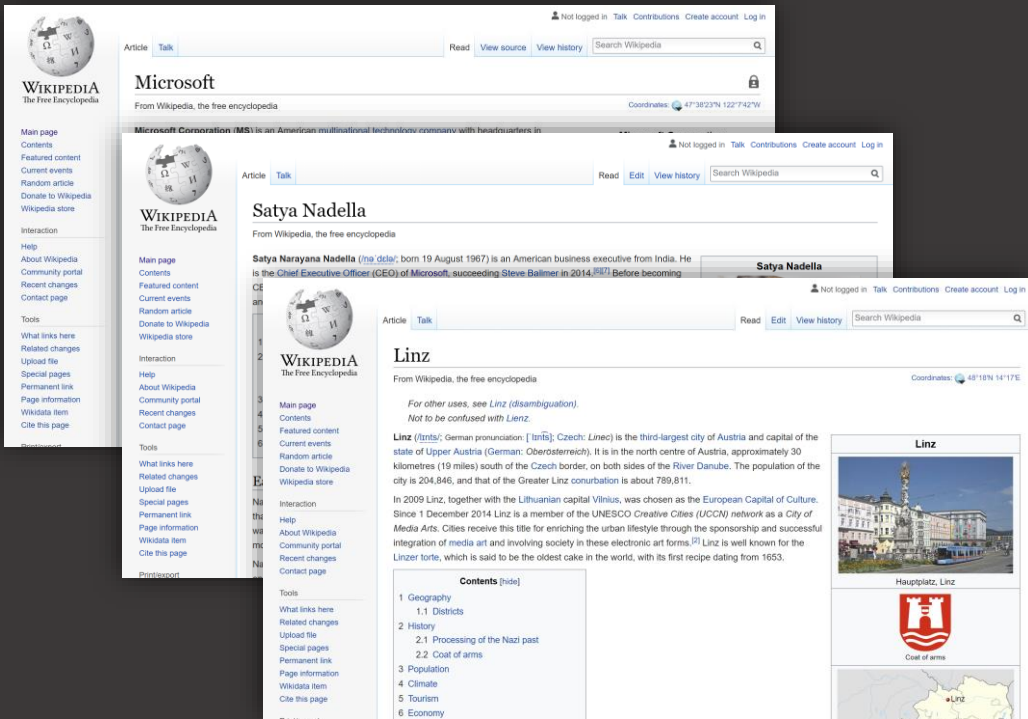
Wiki
Answers

Wiki Answers provides targeted answers to questions about anything. Type in a question and click on "Ask".

ASK

Question Answer System

WIKIANSWERS



INVERSE INDEX

$$\begin{pmatrix}
 \text{microsoft} & \{1:5\} & \dots & \{24:1\} \\
 \text{satya} & \{1:3\} & \dots & \{93:2\} \\
 \dots & \dots & \dots & \dots \\
 \text{linz} & \{2372:9\} & \dots & \{2373:1\}
 \end{pmatrix}$$

WIKIANSWERS

»Who is Satya Nadella?«

- Who
- Satya
- Nadella


$$\begin{pmatrix} \textit{microsoft} & \{1:5\} & \dots & \{24:1\} \\ \textit{satya} & \{1:3\} & \dots & \{93:2\} \\ \dots & \dots & \dots & \dots \\ \textit{linz} & \{2372:9\} & \dots & \{2373:1\} \end{pmatrix}$$

Question Answer System

WIKIANSWERS

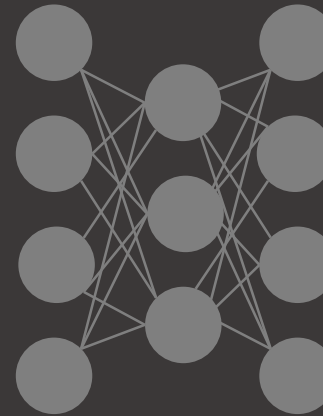


Trained on SQuAD



The image shows two overlapping screenshots of Wikipedia pages. The top one is for 'Microsoft' and the bottom one is for 'Satya Nadella'. The Satya Nadella page includes a table of contents, an 'Early life' section, and a detailed biography.

Satya Nadella	
Born	Satya Narayana Nadella 19 August 1967 (age 51) ^[1] Hyderabad, Andhra Pradesh, India
Citizenship	United States ^[2]
Alma mater	Manipal Institute of Technology (B.E. - Electrical Engineering) University of Wisconsin–Milwaukee (M.S.) University of Chicago (MBA)
Occupation	CEO of Microsoft Corp (2014–present)
Employer	Microsoft (1992–present)
Salary	\$20.0 million (2017) ^[3]
Board	Stack Overflow



»Microsoft CEO«

SQuAD EXAMPLE

The Normans (Norman: Nourmands; French: Normands; Latin: Normanni) were the people who in the 10th and 11th centuries gave their name to Normandy, a region in France. They were descended from Norse ("Norman" comes from "Norseman") raiders and pirates from Denmark, Iceland and Norway who, under their leader Rollo, agreed to swear fealty to King Charles III of West Francia. Through generations of assimilation and mixing with the native Frankish and Roman-Gaulish populations, their descendants would gradually merge with the Carolingian-based cultures of West Francia. The distinct cultural and ethnic identity of the Normans emerged initially in the first half of the 10th century, and it continued to evolve over the succeeding centuries.

Q: In what country is Normandy located?

A: France

SQuAD EXAMPLE

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Q: In what country is Normandy located?

A: France

~~**A: A region in France**~~

THANK YOU

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 [linkedin.com/in/christian-vorhemus](https://www.linkedin.com/in/christian-vorhemus)