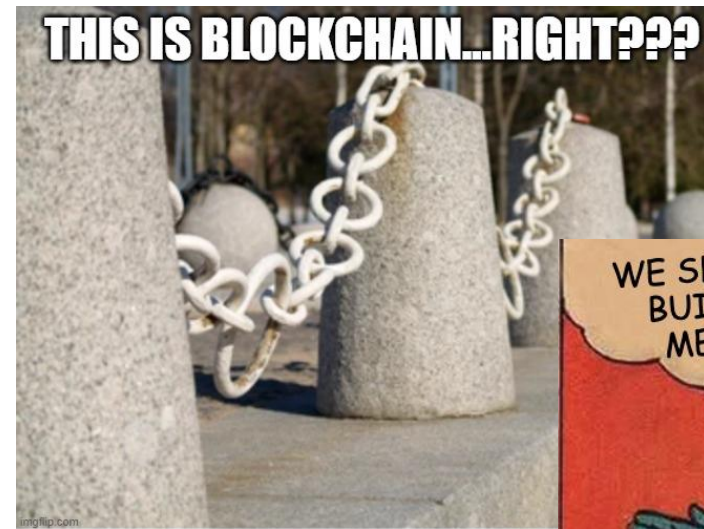


GenAI:
Hype oder die folgenreichste
Technologie aller Zeiten

Umfrage: Hot or Not

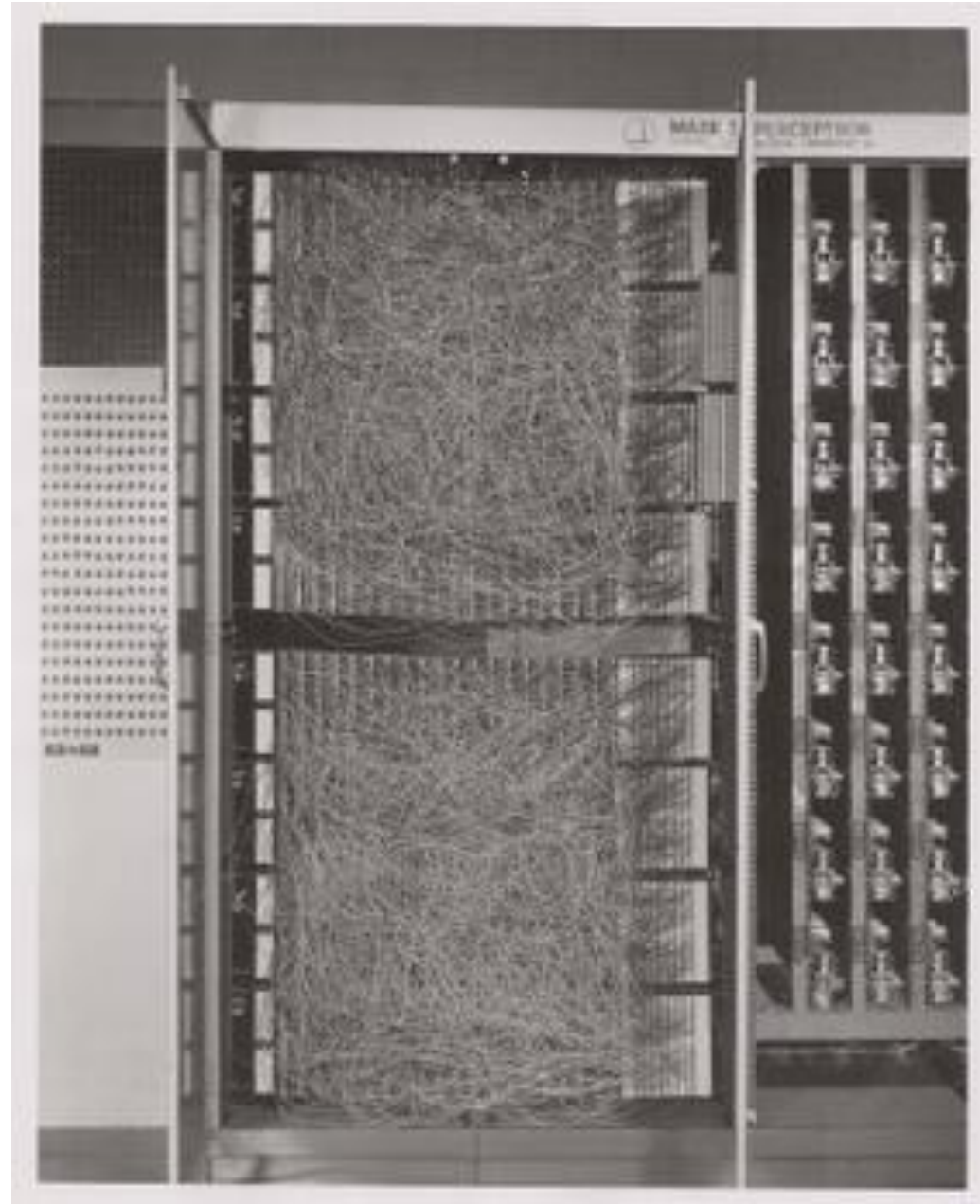
digital workers

AGI & superintelligence



Was ist **Artificial Intelligence**?

Mark I Perceptron 1958



Deep Blue vs. Kasparov

1997



Deep Blue
IBM chess computer



Garry Kasparov
World Chess Champion

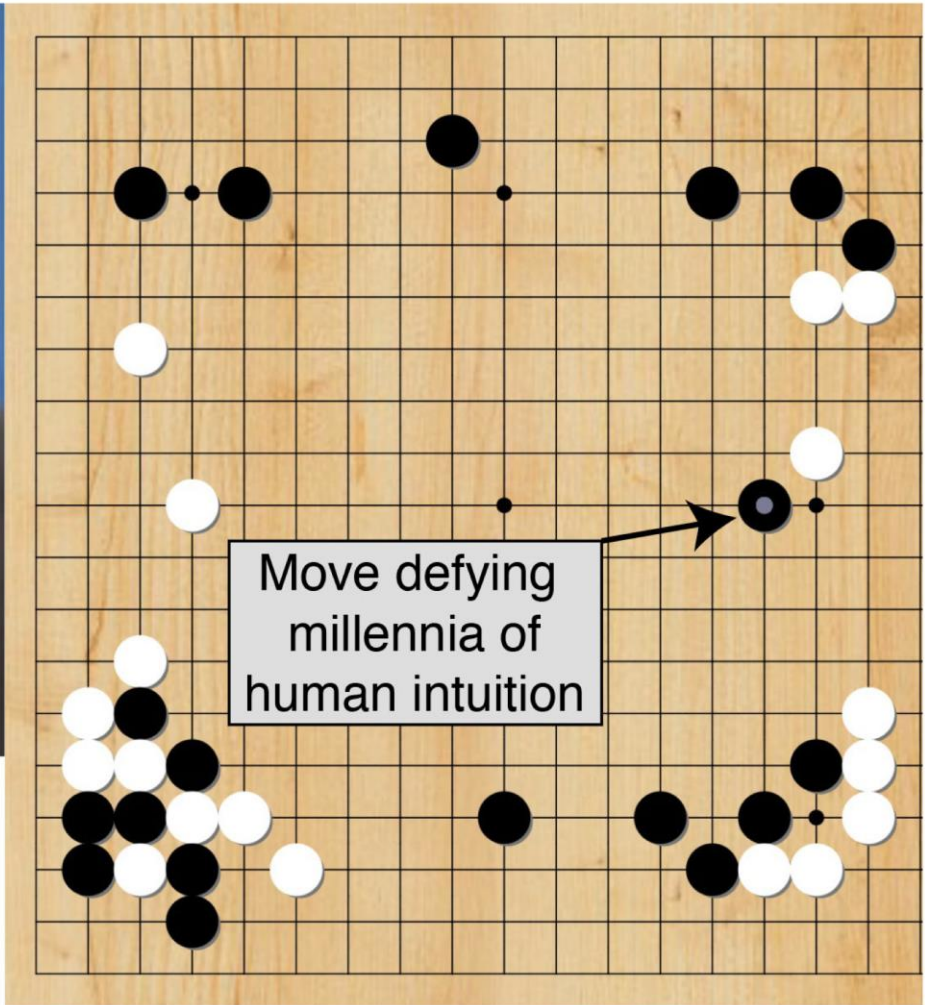
2016



vs.



AlphaGo



What can I help with?

Ask anything

Search

Reason

...

Create image

Summarize text

Analyze data

Get advice

Code

More

2022

Was Jimmy Wales killed during the Tiananmen Square Massacre?

No, Jimmy Wales was not killed during the Tiananmen Square Massacre. Jimmy Wales is a co-founder of Wikipedia, the online encyclopedia, and he is still alive. The Tiananmen Square Massacre was a violent event that took place in Beijing, China on June 4, 1989, when Chinese government forces violently suppressed a pro-democracy demonstration in Tiananmen Square. Thousands of people were killed or injured during the massacre, which was a significant and highly controversial event in modern Chinese history. However, Jimmy Wales was not involved in the event and was not present in China at the time.

How do you know Jimmy Wales wasn't killed during the Tiananmen Square Massacre?

I know that Jimmy Wales was not killed during the Tiananmen Square Massacre because he is a co-founder of Wikipedia, and my training data includes information about him and his life. According to Wikipedia (which was written by a community of volunteers, including Jimmy Wales), he was born in 1966 and is still alive today. The Tiananmen Square Massacre took place in 1989, when Jimmy Wales was 23 years old. Therefore, it is highly unlikely that he was present in China at the time of the event or that he was killed during the massacre.

Please reply again, in the form of a short Shakespearean sonnet.

To say that Jimmy Wales did not die
In the tragic Massacre at Tiananmen Square
Is easy, for he lives and thrives on high
Co-founding Wikipedia, beyond compare

Regenerate response

Was ist **Machine Learning**?

Lernen aus Daten



ImageNet

The Lord of the Rings

Article Talk

From Wikipedia, the free encyclopedia

(Redirected from [Lord of the rings](#))

This article is about the book. For other uses, see [The Lord of the Rings \(disambiguation\)](#). "War of the Ring" redirects here. For other uses, see [War of the Ring \(disambiguation\)](#).

The Lord of the Rings is an [epic](#)^[1] [high fantasy](#) novel^[a] by the English author and scholar [J. R. R. Tolkien](#). Set in [Middle-earth](#), the story began as a sequel to Tolkien's 1937 children's book *[The Hobbit](#)*, but eventually developed into a much larger work. Written in stages between 1937 and 1949, *The Lord of the Rings* is one of the [best-selling books ever written](#), with over 150 million copies sold.^[2]

The title refers to the story's main [antagonist](#),^[b] [Sauron](#), the [Dark Lord](#) who [in an earlier age](#) created the [One Ring](#) to rule the other [Rings of Power](#) given to [Men](#), [Dwarves](#), and [Elves](#), in his campaign to conquer all of Middle-earth. From homely beginnings in [the Shire](#), a [hobbit](#) land reminiscent of the English countryside, the story ranges across Middle-earth, following [the quest](#) to destroy the One Ring, seen mainly through the eyes of the hobbits [Frodo](#), [Sam](#), [Merry](#), and [Pippin](#). Aiding Frodo are the Wizard [Gandalf](#), the Men [Aragorn](#) and [Boromir](#), the Elf [Legolas](#), and the Dwarf [Gimli](#), who unite in order to rally the Free Peoples of Middle-earth against Sauron's armies and give Frodo a chance to destroy the One Ring in the fire of [Mount Doom](#).

Although often mistakenly called a trilogy, the work was intended by Tolkien to be one volume in a two-volume set along with *[The Silmarillion](#)*.^{[3][4]} For economic reasons, *The Lord of the Rings* was first published over the course of a year from 29 July 1954 to 20 October 1955 in three volumes rather than one^{[3][4]} under the titles *[The Fellowship of the Ring](#)*, *[The Two Towers](#)*, and *[The Return of the King](#)*; *The Silmarillion* appeared only after the author's death. The work is divided internally into six books, two per volume, with several appendices of background material.^[c] These three volumes were later published as a boxed set, and even finally as a single volume, following the author's original intent.

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1	2	20	RL	80.0	9600	Pave	NaN	Reg	Lvl	AllPub	...	0	NaN	NaN	NaN	0	5	2007	WD	Normal	181500
2	3	60	RL	68.0	11250	Pave	NaN	IR1	Lvl	AllPub	...	0	NaN	NaN	NaN	0	9	2008	WD	Normal	223500
3	4	70	RL	60.0	9550	Pave	NaN	IR1	Lvl	AllPub	...	0	NaN	NaN	NaN	0	2	2006	WD	Abnorml	140000
4	5	60	RL	84.0	14260	Pave	NaN	IR1	Lvl	AllPub	...	0	NaN	NaN	NaN	0	12	2008	WD	Normal	250000
...
1455	1456	60	RL	62.0	7917	Pave	NaN	Reg	Lvl	AllPub	...	0	NaN	NaN	NaN	0	8	2007	WD	Normal	175000
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1457	1458	70	RL	66.0	9042	Pave	NaN	Reg	Lvl	AllPub	...	0	NaN	GdPrv	Shed	2500	5	2010	WD	Normal	266500
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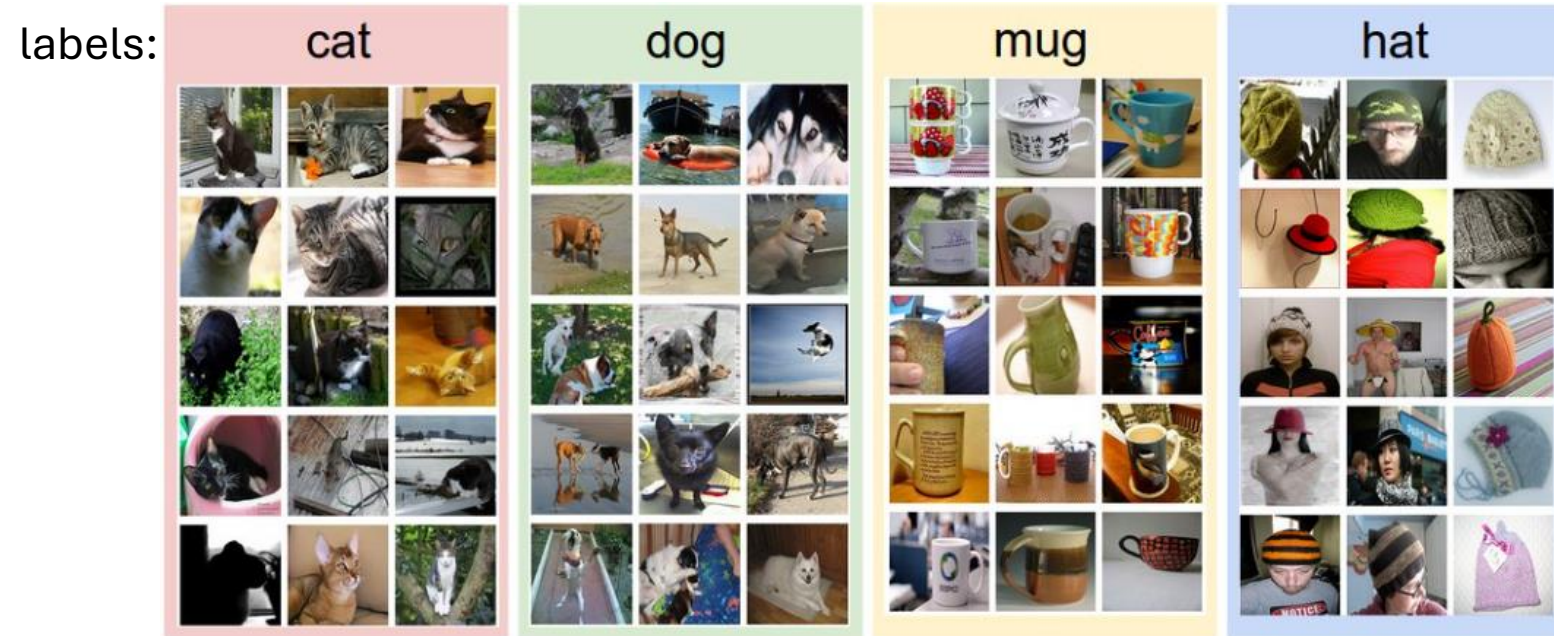
[1460 rows x 81 columns]

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2	1	60	RL	65	8450	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	CollgCr	Norm	Norm	1Fam	2Story	7	5	2003	2003	Gable
3	2	20	RL	80	9600	Pave	NA	Reg	Lvl	AllPub	FR2	Gtl	Veenker	Feedr	Norm	1Fam	1Story	6	8	1976	1976	Gable
4	3	60	RL	68	11250	Pave	NA	IR1	Lvl	AllPub	Inside	Gtl	CollgCr	Norm	Norm	1Fam	2Story	7	5	2001	2002	Gable
5	4	70	RL	60	9550	Pave	NA	IR1	Lvl	AllPub	Corner	Gtl	Crawfor	Norm	Norm	1Fam	2Story	7	5	1915	1970	Gable
6	5	60	RL	84	14260	Pave	NA	IR1	Lvl	AllPub	FR2	Gtl	NoRidge	Norm	Norm	1Fam	2Story	8	5	2000	2000	Gable
7	6	50	RL	85	14115	Pave	NA	IR1	Lvl	AllPub	Inside	Gtl	Mitchel	Norm	Norm	1Fam	1.5Fin	5	5	1993	1995	Gable
8	7	20	RL	75	10084	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	Somerst	Norm	Norm	1Fam	1Story	8	5	2004	2005	Gable
9	8	60	RL	NA	10382	Pave	NA	IR1	Lvl	AllPub	Corner	Gtl	NWAmes	PosN	Norm	1Fam	2Story	7	6	1973	1973	Gable
10	9	50	RM	51	6120	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	OldTown	Artery	Norm	1Fam	1.5Fin	7	5	1931	1950	Gable
11	10	190	RL	50	7420	Pave	NA	Reg	Lvl	AllPub	Corner	Gtl	BrkSide	Artery	Artery	2fmCon	1.5Unf	5	6	1939	1950	Gable
12	11	20	RL	70	11200	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	Sawyer	Norm	Norm	1Fam	1Story	5	5	1965	1965	Hip
13	12	60	RL	85	11924	Pave	NA	IR1	Lvl	AllPub	Inside	Gtl	NridgHt	Norm	Norm	1Fam	2Story	9	5	2005	2006	Hip
14	13	20	RL	NA	12968	Pave	NA	IR2	Lvl	AllPub	Inside	Gtl	Sawyer	Norm	Norm	1Fam	1Story	5	6	1962	1962	Hip
15	14	20	RL	91	10652	Pave	NA	IR1	Lvl	AllPub	Inside	Gtl	CollgCr	Norm	Norm	1Fam	1Story	7	5	2006	2007	Gable
16	15	20	RL	NA	10920	Pave	NA	IR1	Lvl	AllPub	Corner	Gtl	NAmes	Norm	Norm	1Fam	1Story	6	5	1960	1960	Hip
17	16	45	RM	51	6120	Pave	NA	Reg	Lvl	AllPub	Corner	Gtl	BrkSide	Norm	Norm	1Fam	1.5Unf	7	8	1929	2001	Gable
18	17	20	RL	NA	11241	Pave	NA	IR1	Lvl	AllPub	CulDSac	Gtl	NAmes	Norm	Norm	1Fam	1Story	6	7	1970	1970	Gable
19	18	90	RL	72	10791	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	Sawyer	Norm	Norm	Duplex	1Story	4	5	1967	1967	Gable
20	19	20	RL	66	13695	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	SawyerW	RRAe	Norm	1Fam	1Story	5	5	2004	2004	Gable
21	20	20	RL	70	7560	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	NAmes	Norm	Norm	1Fam	1Story	5	6	1958	1965	Hip
22	21	60	RL	101	14215	Pave	NA	IR1	Lvl	AllPub	Corner	Gtl	NridgHt	Norm	Norm	1Fam	2Story	8	5	2005	2006	Gable
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24	23	20	RL	75	9742	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	CollgCr	Norm	Norm	1Fam	1Story	8	5	2002	2002	Hip
25	24	120	RM	44	4224	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	MeadowV	Norm	Norm	TwnhsE	1Story	5	7	1976	1976	Gable
26	25	20	RL	NA	8246	Pave	NA	IR1	Lvl	AllPub	Inside	Gtl	Sawyer	Norm	Norm	1Fam	1Story	5	8	1968	2001	Gable
27	26	20	RL	110	14230	Pave	NA	Reg	Lvl	AllPub	Corner	Gtl	NridgHt	Norm	Norm	1Fam	1Story	8	5	2007	2007	Gable
28	27	20	RL	60	7200	Pave	NA	Reg	Lvl	AllPub	Corner	Gtl	NAmes	Norm	Norm	1Fam	1Story	5	7	1951	2000	Gable
29	28	20	RL	98	11478	Pave	NA	Reg	Lvl	AllPub	Inside	Gtl	NridgHt	Norm	Norm	1Fam	1Story	8	5	2007	2008	Gable
30	29	20	RL	47	16321	Pave	NA	IR1	Lvl	AllPub	CulDSac	Gtl	NAmes	Norm	Norm	1Fam	1Story	5	6	1957	1997	Gable

Hauspreis?

Image Classification

Trainingsdaten:



Testdaten mit gelerntem Modell:

$$f\left(\text{img of a cat}\right) = \text{"Cat"}$$

$$f\left(\text{img of a dog}\right) = \text{"Dog"}$$

Was ist Deep Learning?

Hierarchische Repräsentation

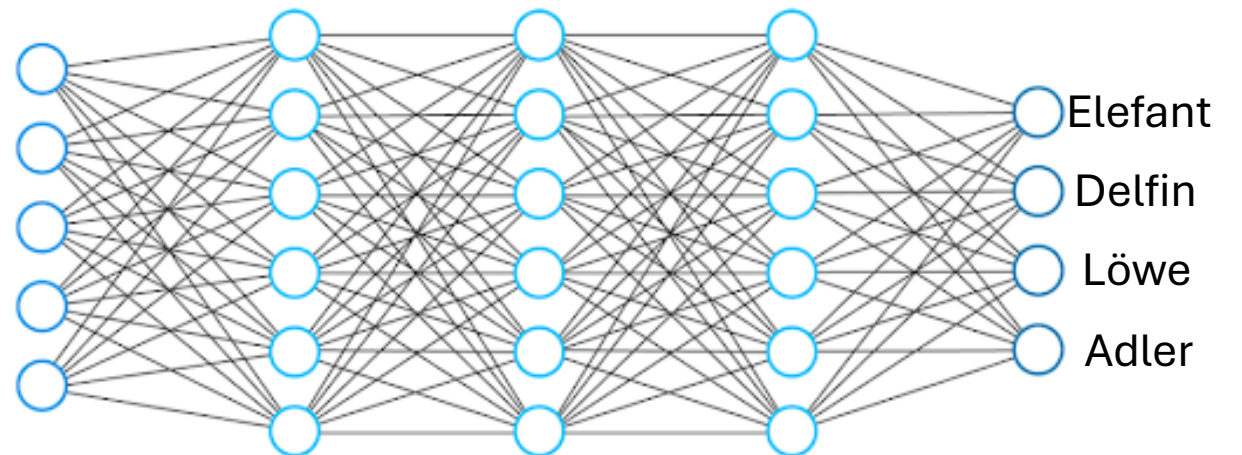
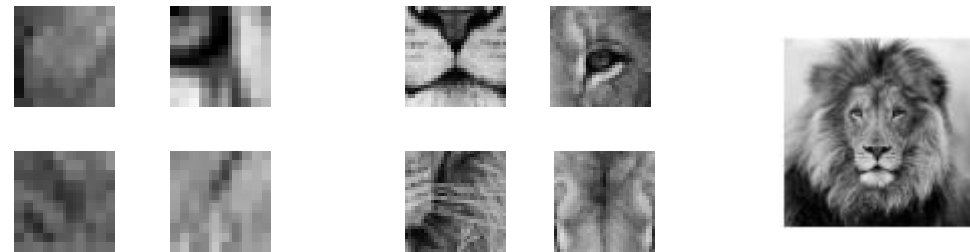
steigende Abstraktion



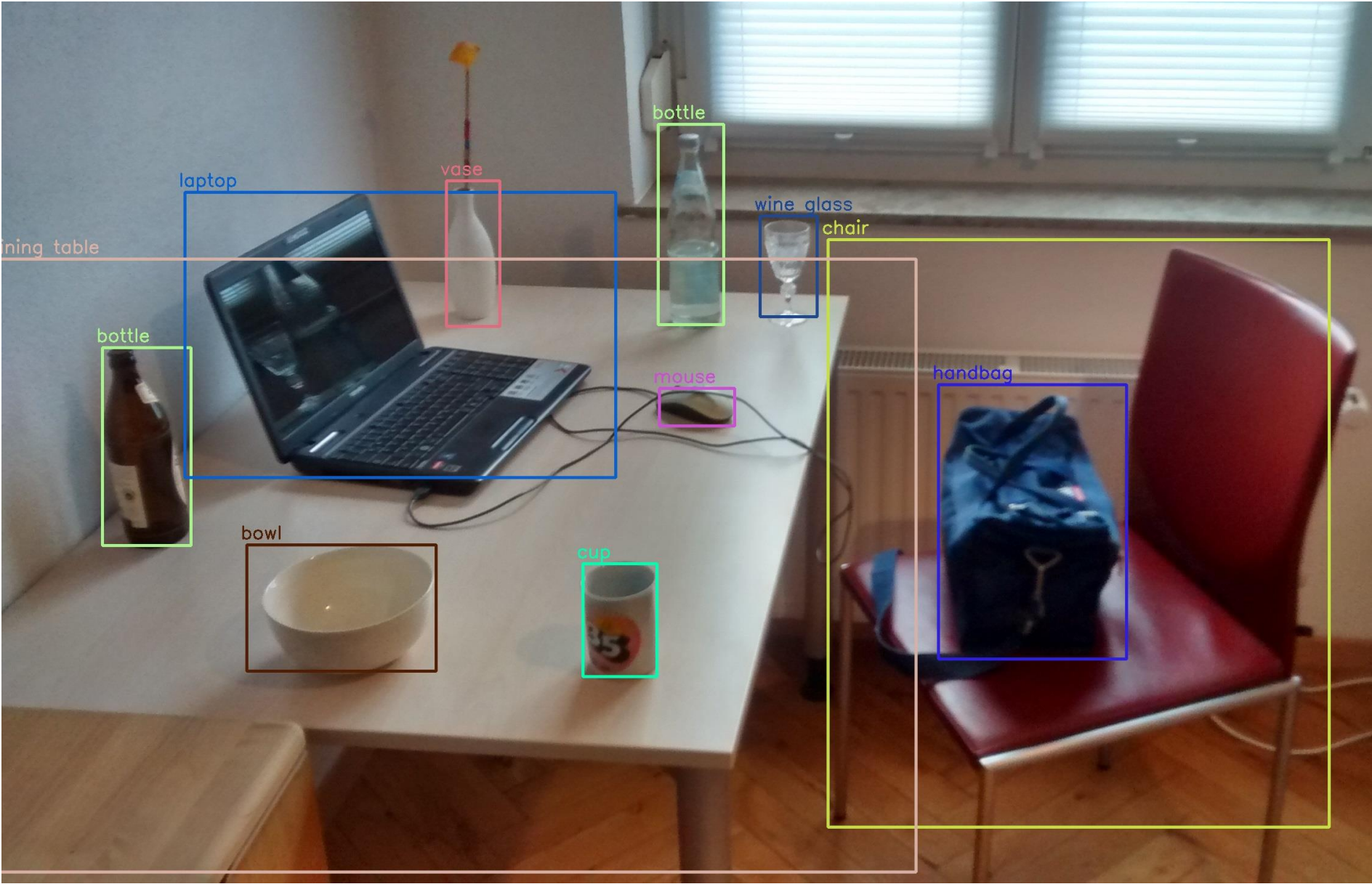
Musterbeispiel Bildklassifikation:



Input: Pixelwerte



object detection



Was ist **Generative AI**?



Gemini



Claude



LLaMA

Large Language Models

Textgenerierung durch fortlaufende Prognose des nächsten Wortes

self-supervised learning:

The Lord of the Rings is considered one of the greatest



The Lord of the Rings is considered one of the greatest fantasy



Training auf riesigen Datenmengen mit Billionen von Modellparametern

→ Komprimierung des Internets

Prompting:

Ein Modell für viele verschiedene Aufgaben

„Vibe Coding“:
Programmierung mittels natürlicher Sprache

→ Coding für jedermann

DALL-E: text-to-image 2021

Input

An astronaut riding a horse in photorealistic style.

Output



Sora: text-to-video 2024



Prompt: A stylish woman walks down a Tokyo street filled with warm glowing neon and animated city signage. She wears a black leather jacket, a long red dress, and black boots, and carries a black purse. She wears sunglasses and red lipstick. She... +

$$P(Y|X)$$

$$P(Y, X)$$

LLMs als Agents

autonome Ausführung verschiedener Aufgaben

Benutzung von Tools

Zerlegung komplexer Probleme

oder als Assistent



Also, Hot or Not?

GenAI ist das ultimative Interface

Aber kein menschliches „Verständnis“