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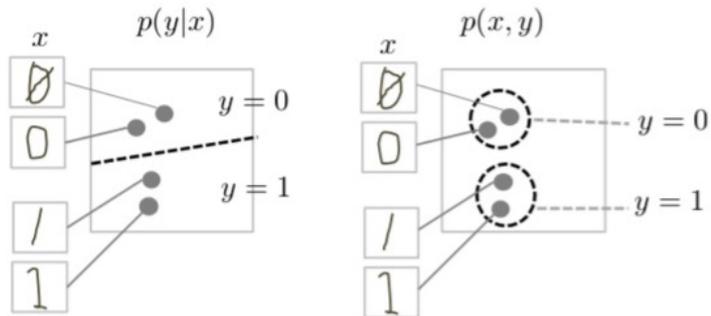
piotr.wyrwinski@pcss.pl

A large, semi-transparent graphic of the number '30' is overlaid on the right side of the slide. The background of the entire slide is a dark blue server room with glowing green binary code (0s and 1s) and server racks. The '30' graphic is positioned in the upper right quadrant, partially overlapping the server racks.

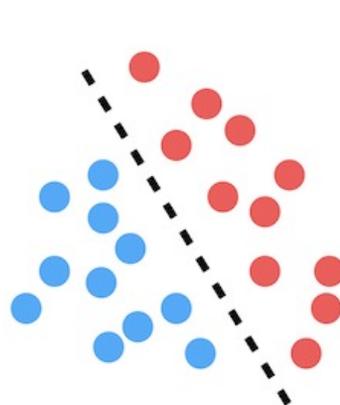
**Generatywne AI – ChatGPT
i inne narzędzia**

Generatywne AI – ChatGPT i inne narzędzia

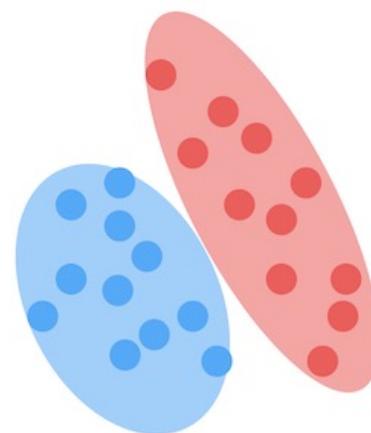
Definicja – Generative AI



Discriminative

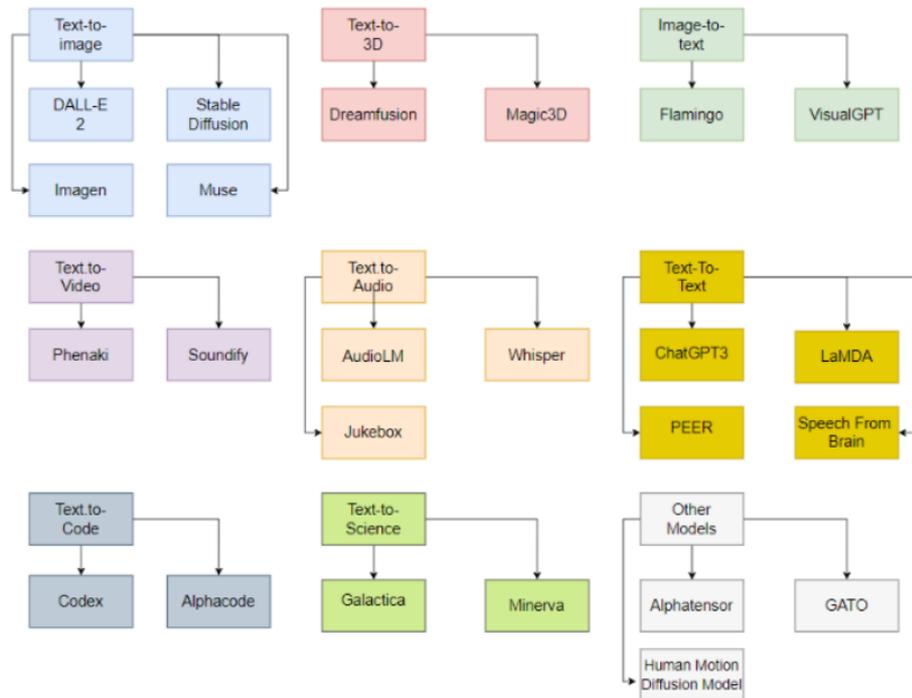


Generative



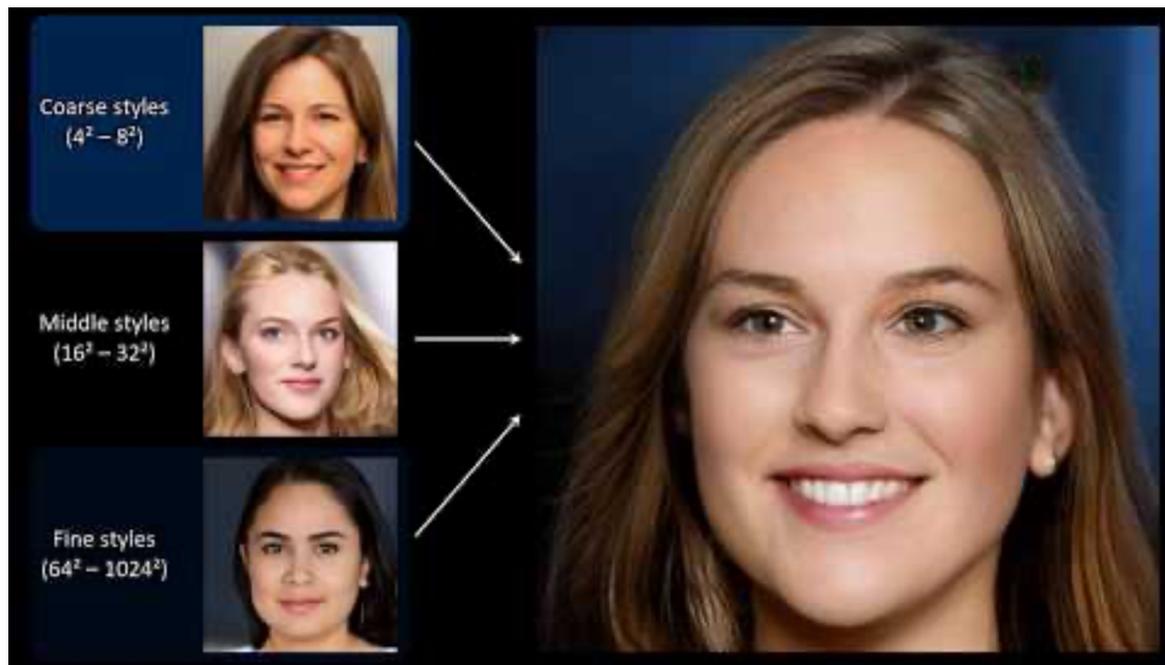
Generatywne AI – ChatGPT i inne narzędzia

Rodzaje generatywnych modeli AI



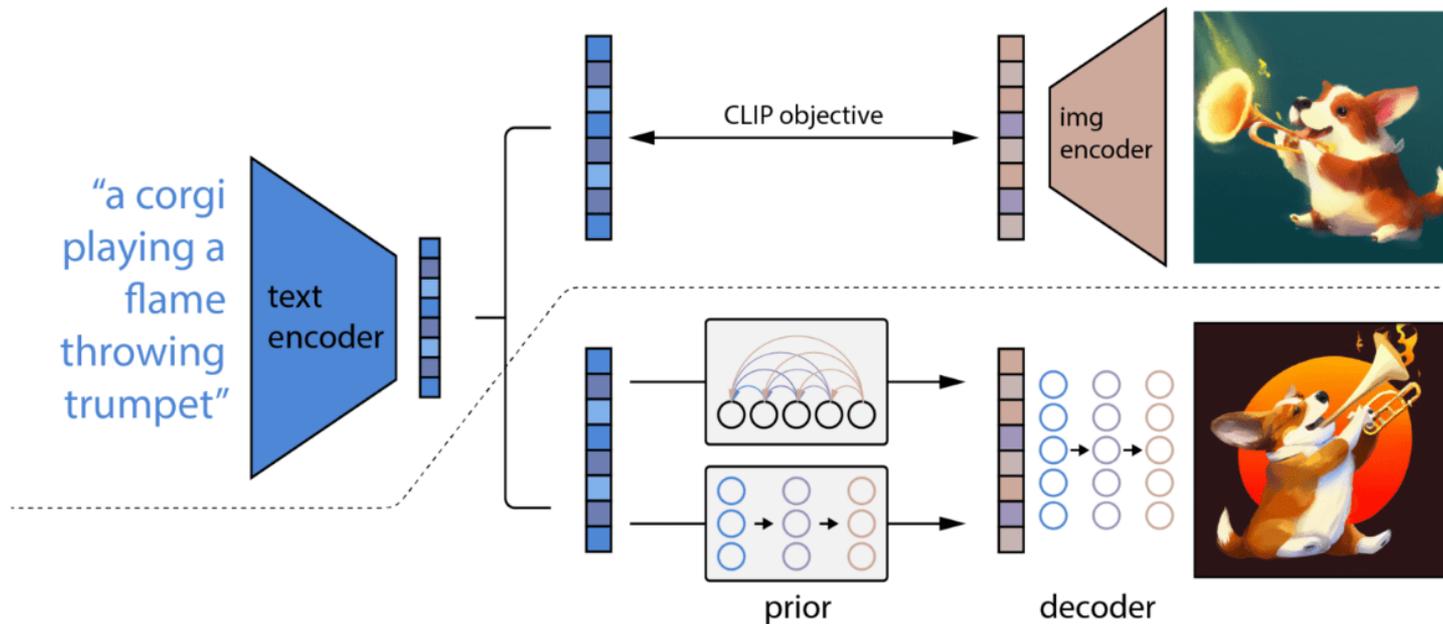
Generatywne modele dla obrazów

StyleGAN



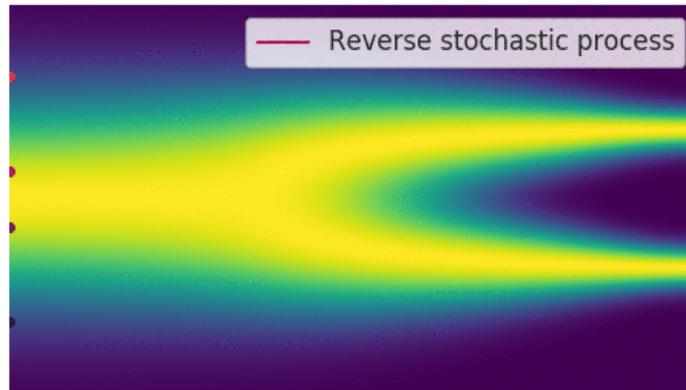
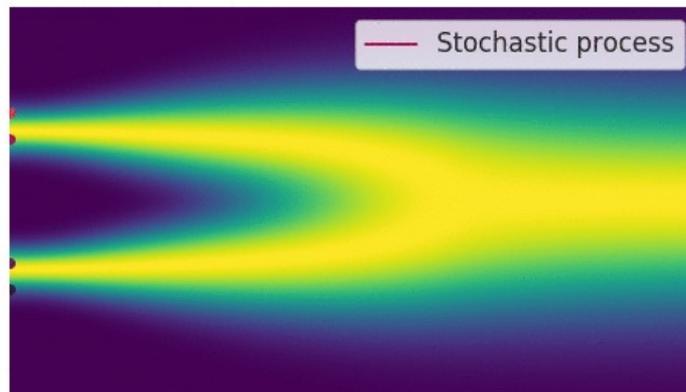
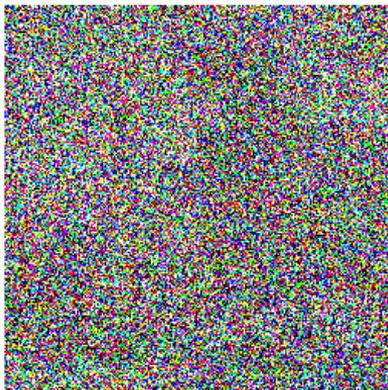
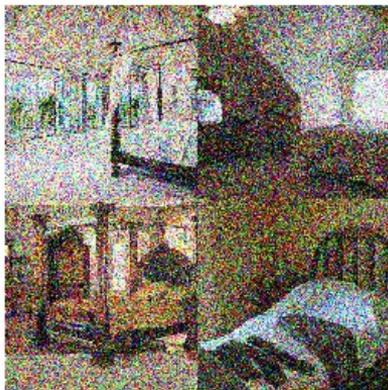
Generatywne modele dla obrazów

DALL-E



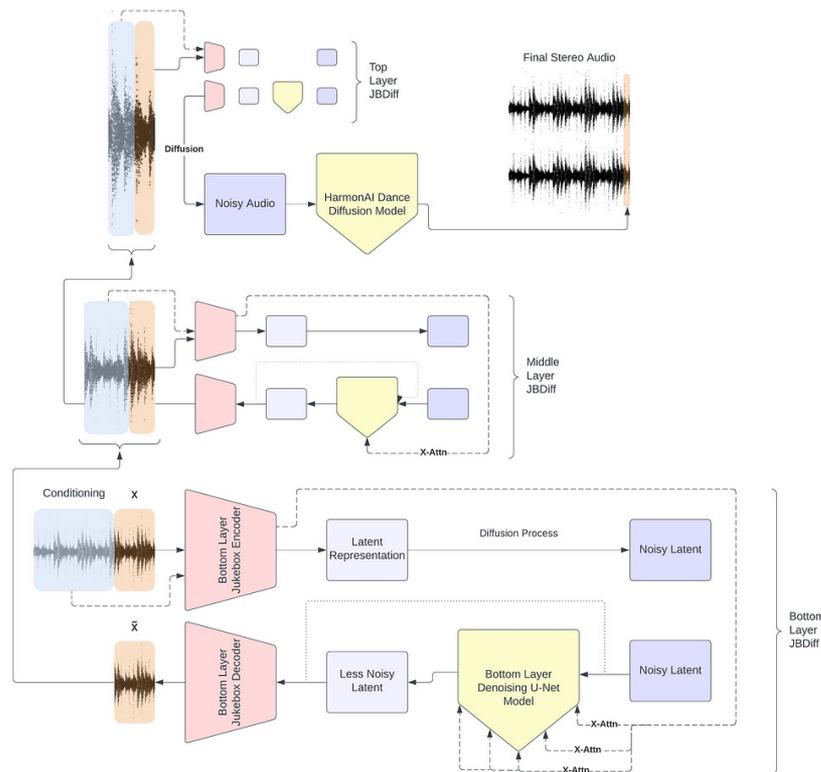
Generatywne modele dla obrazów

DALL-E



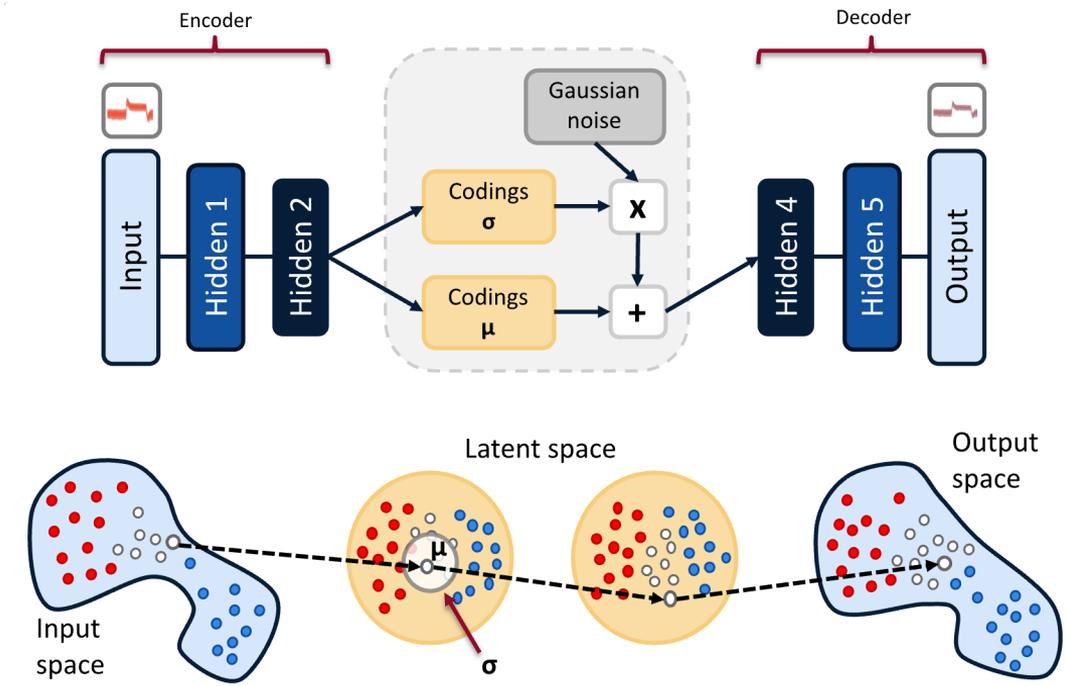
Generatywne modele dla muzyki

OpenAI Jukebox



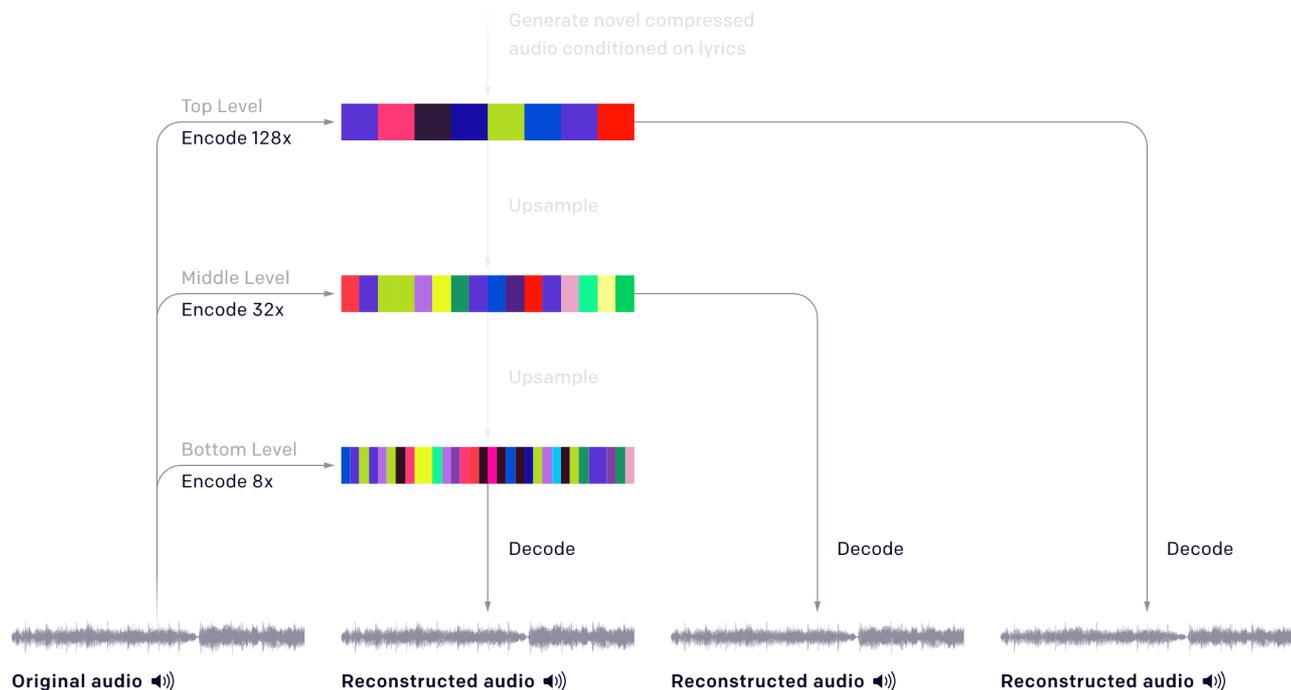
Generatywne modele dla muzyki

OpenAI Jukebox



Generatywne modele dla muzyki

OpenAI Jukebox



Generatywne modele dla tekstu

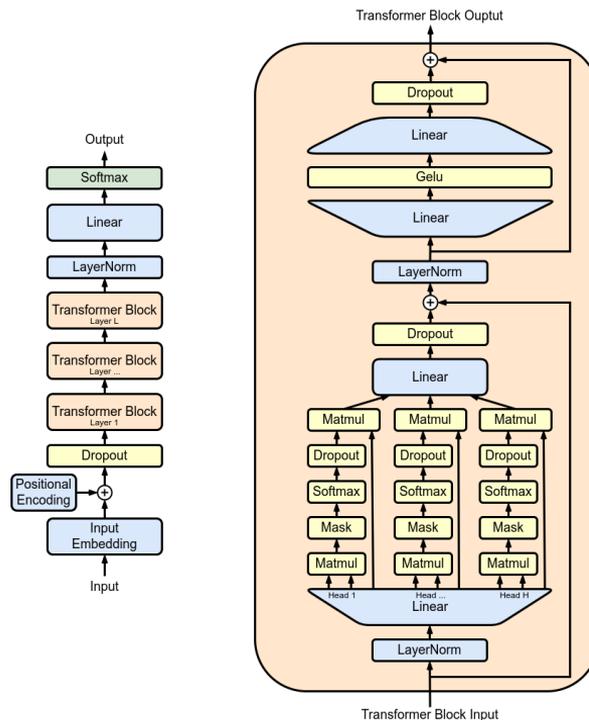
GPT & BERT



Google
BERT

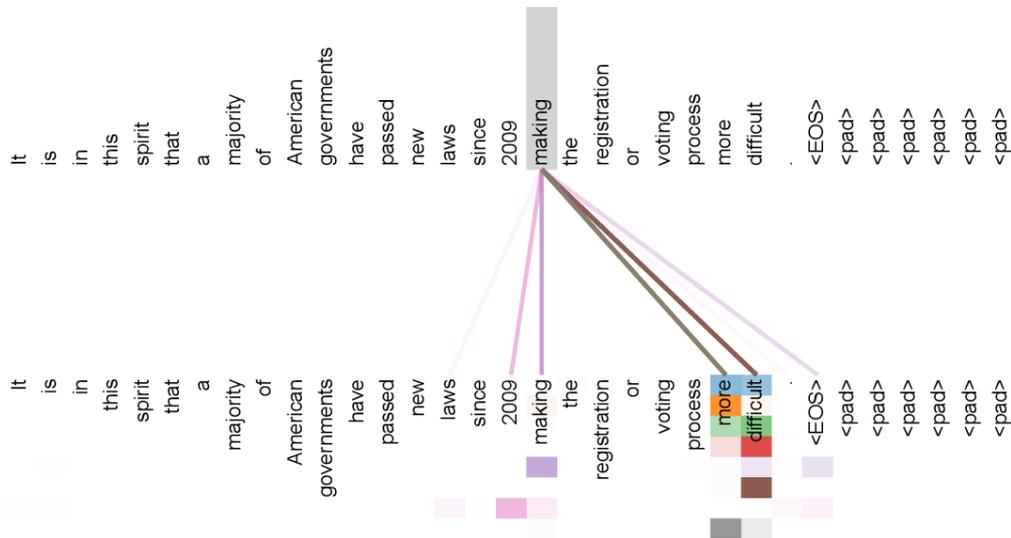
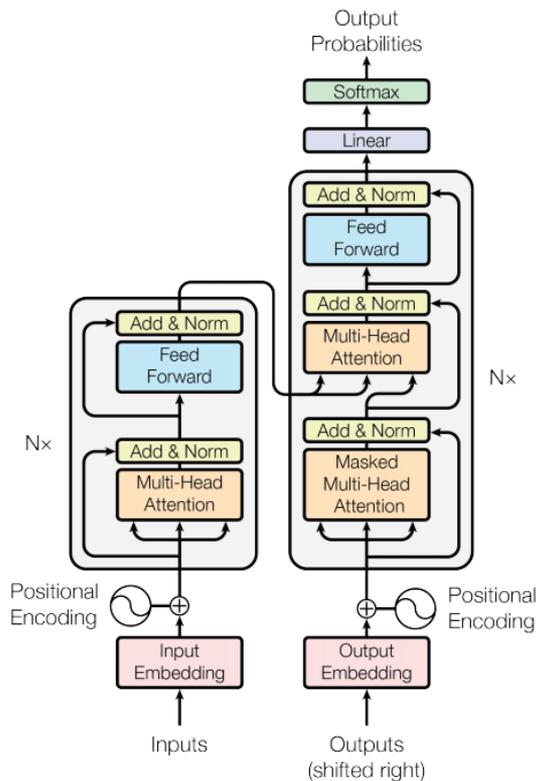
Generatywne modele dla tekstu

GPT



Generatywne modele dla tekstu

GPT

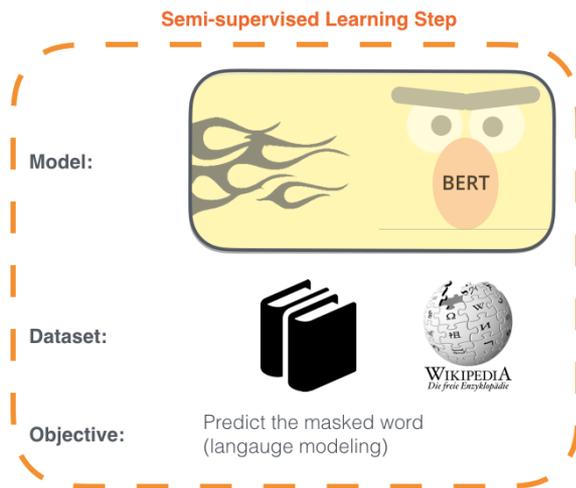


Generatywne modele dla tekstu

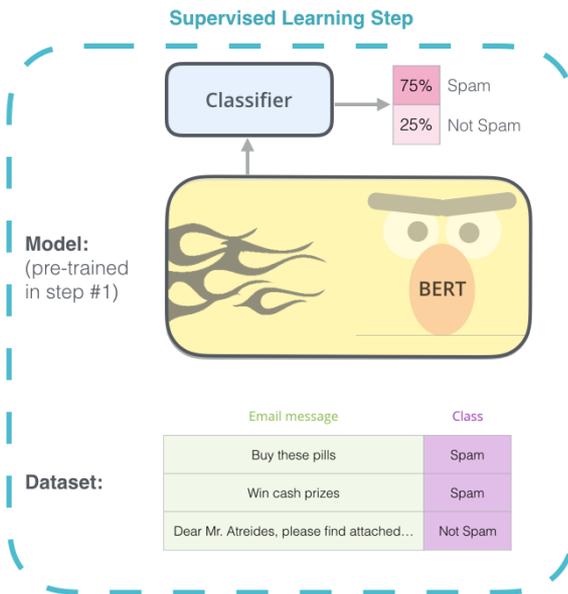
BERT

1 - **Semi-supervised** training on large amounts of text (books, wikipedia..etc).

The model is trained on a certain task that enables it to grasp patterns in language. By the end of the training process, BERT has language-processing abilities capable of empowering many models we later need to build and train in a supervised way.

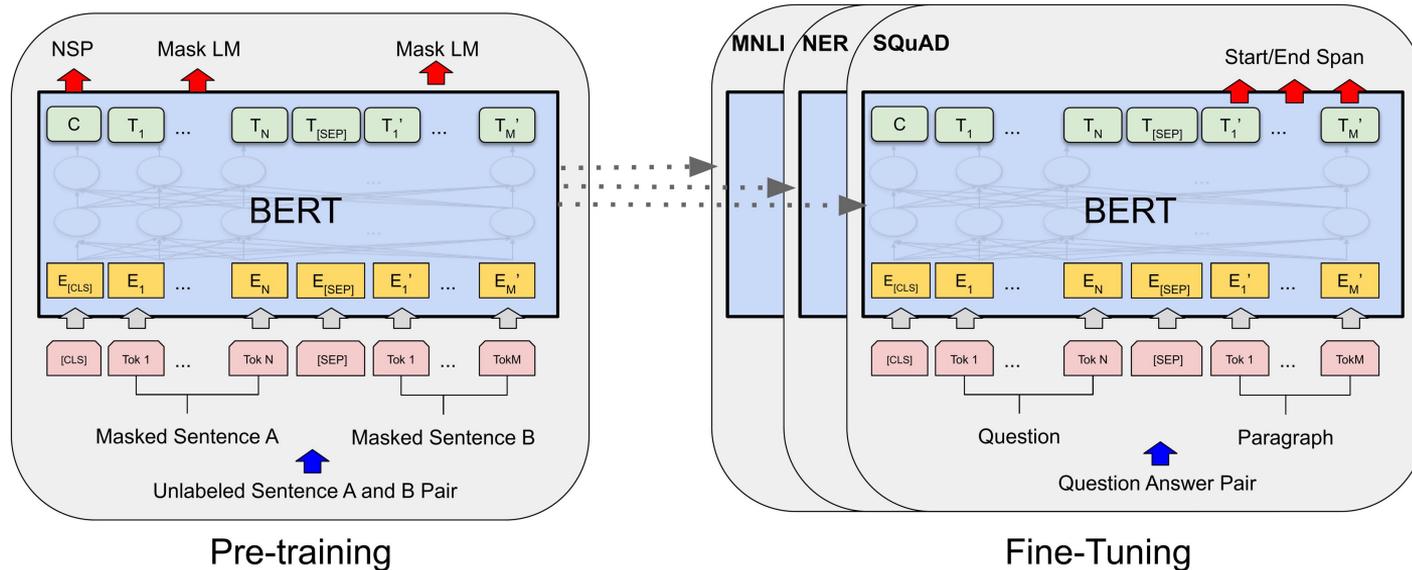


2 - **Supervised** training on a specific task with a labeled dataset.



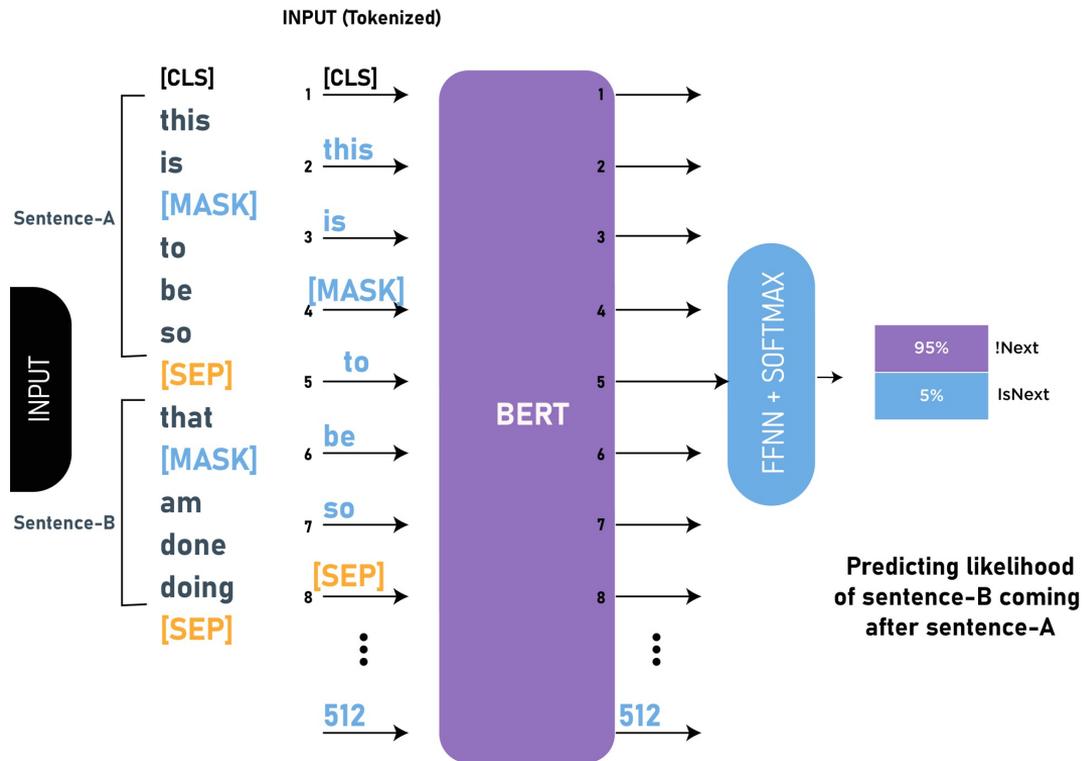
Generatywne modele dla tekstu

BERT



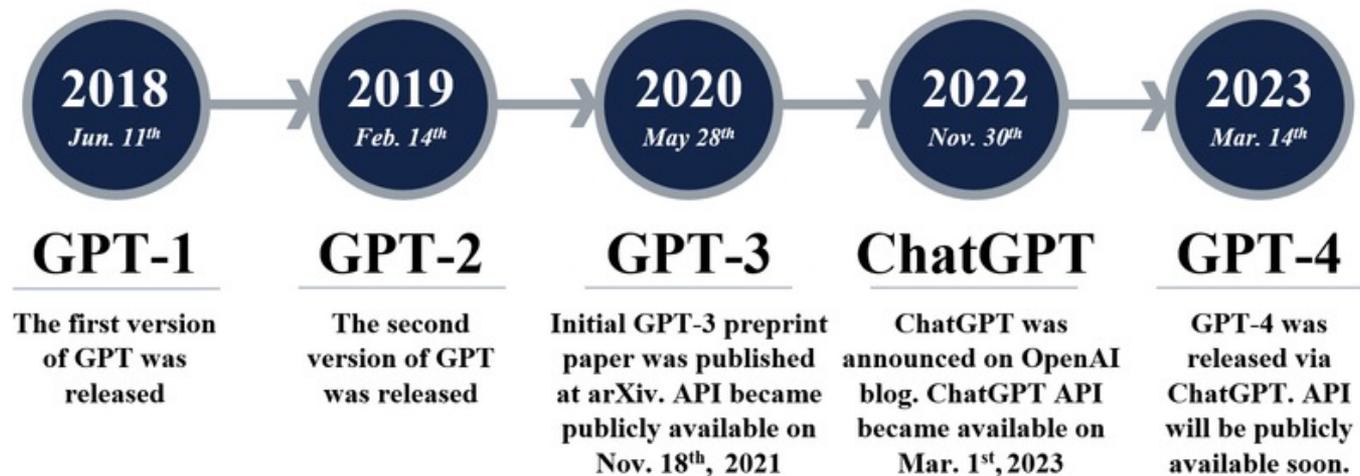
Generatywne modele dla tekstu

BERT



ChatGPT - Przegląd

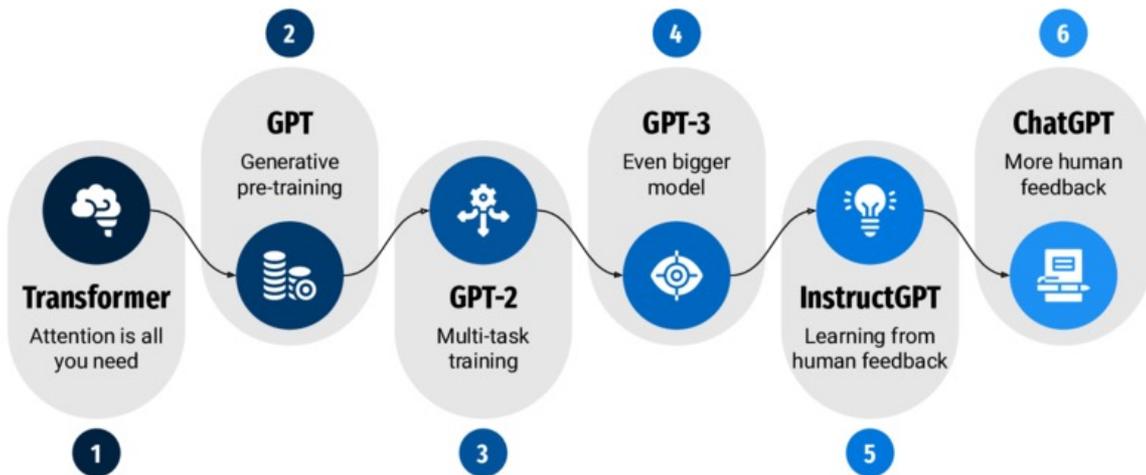
Historia rozwoju (GPT-2, GPT-3)



ChatGPT - Przegląd

Historia rozwoju (GPT-2, GPT-3)

Evolution from Transformer architecture to ChatGPT



ChatGPT - Przegląd

Historia rozwoju (GPT-2, GPT-3)

Step 1

Collect demonstration data and train a supervised policy.

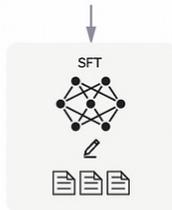
A prompt is sampled from our prompt dataset.



A labeler demonstrates the desired output behavior.



This data is used to fine-tune GPT-3.5 with supervised learning.



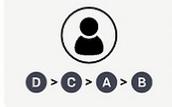
Step 2

Collect comparison data and train a reward model.

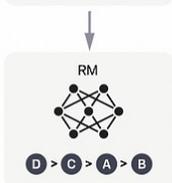
A prompt and several model outputs are sampled.



A labeler ranks the outputs from best to worst.



This data is used to train our reward model.



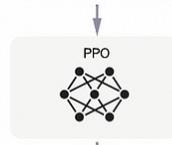
Step 3

Optimize a policy against the reward model using the PPO reinforcement learning algorithm.

A new prompt is sampled from the dataset.



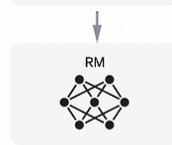
The PPO model is initialized from the supervised policy.



The policy generates an output.



The reward model calculates a reward for the output.

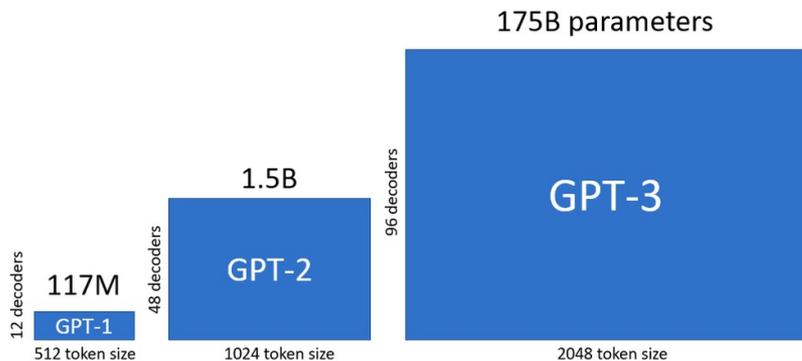


The reward is used to update the policy using PPO.



ChatGPT - Przegląd

Innowacje w przetwarzaniu języka naturalnego



```
Here is an example of how you can create a donut chart using Chart.js:

// Set the dimensions of the canvas element
var canvas = document.getElementById("myChart");
var ctx = canvas.getContext("2d");
var chartWidth = canvas.width;
var chartHeight = canvas.height;

// Create the data for the chart
var data = {
  labels: ["Red", "Blue", "Yellow", "Green", "Purple", "Orange"],
  datasets: [{
    data: [12, 19, 3, 5, 2, 3],
    backgroundColor: [
      "rgba(255, 99, 132, 0.2)",
      "rgba(54, 162, 235, 0.2)",
      "rgba(255, 206, 86, 0.2)",
      "rgba(75, 192, 192, 0.2)",
      "rgba(153, 102, 255, 0.2)",
      "rgba(255, 159, 64, 0.2)"
    ],
    borderColor: [
      "rgba(255, 99, 132, 1)",
      "rgba(54, 162, 235, 1)",
      "rgba(255, 206, 86, 1)",
      "rgba(75, 192, 192, 1)",
      "rgba(153, 102, 255, 1)",
      "rgba(255, 159, 64, 1)"
    ]
  }]
}
```

Turn 1

Human: hi

AI: hello

Turn 2

Human: how are you

AI: am fine

Few-shot Prompt

Classify these conversations:

Text: My service was awesome.
Label: **positive** ✓

Text: My order never arrived.
Label: **positive** ✗

Text: Thanks for great service!
Label: **positive** ✓

Text: Horrible customer service!
Label: **positive** ✗

ChatGPT

Zastosowania ChatGPT

Interaktywne rozmowy i asystent osobisty

ChatGPT

Examples	Capabilities	Limitations
"Explain quantum computing in simple terms"	Remembers what user said earlier in the conversation	May occasionally generate incorrect information
"Got any creative ideas for a 10 year old's birthday?"	Allows user to provide follow-up corrections	May occasionally produce harmful instructions or biased content
"How do I make an HTTP request in Javascript?"	Trained to decline inappropriate requests	Limited knowledge of world and events after 2021

Free Research Preview: ChatGPT is optimized for dialogue. Our goal is to make AI systems more natural to interact with, and your feedback will help us improve our systems and make them safer.

Zastosowania ChatGPT

Kreowanie treści tekstowych

 Create a template for an accountant's resume with ten years of experience. Include sections for accomplishments, skills and certifications.

 [Your Name]
[Address]
[City, State, ZIP Code]
[Phone Number]
[Email Address]

Objective:

A highly skilled and detail-oriented accountant with ten years of experience in financial analysis, reporting, and taxation. Seeking a challenging position in a reputable organization where I can utilize my expertise to contribute to the financial success and growth of the company.

Summary of Qualifications:

- Accomplished accountant with a proven track record of managing financial operations, optimizing processes, and delivering accurate and timely financial information.
- Expertise in financial analysis, budgeting, forecasting, and variance analysis.
- Proficient in preparing financial statements, balance sheets, income statements, and cash flow statements.
- Strong knowledge of accounting principles, tax regulations, and compliance standards.
- Excellent problem-solving skills and ability to remain calm under pressure.

Send a message

 Write a welcome email for a new subscriber to my newsletter.



Dear [Subscriber],



Welcome to our newsletter! We're so excited to have you join our community and be a part of all the great things we have planned.

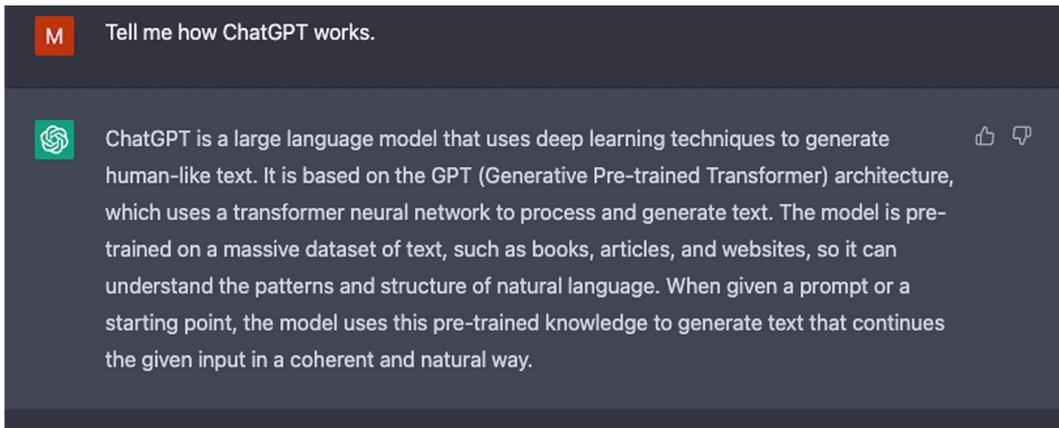
As a new subscriber, you'll receive regular updates on our latest content, exclusive deals and offers, and exciting events and promotions. We're dedicated to providing you with valuable information and resources that will help you stay up-to-date and informed.

Thank you for choosing to join us. We look forward to sharing our journey with you and hearing your thoughts and feedback.

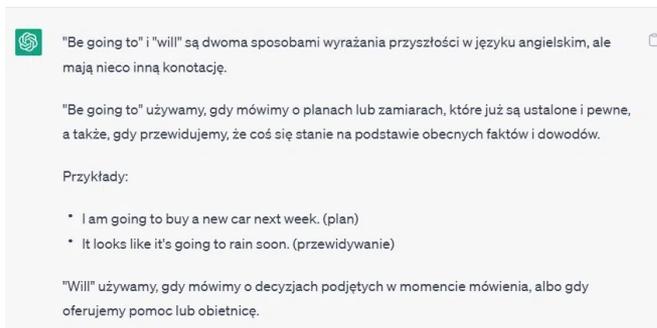
Best regards,
[Your Name]

Zastosowania ChatGPT

Wykorzystanie w edukacji



wytłumacz mi różnicę pomiędzy "be going to" i "will"



Funkcje kluczowe ChatGPT

Generowanie tekstu na żądanie

BE Write an AI paper for the upcoming International Conference on Machine Learning (ICML)

🌀 Title: "Exploring the Limits of Transfer Learning with Deep Neural Networks"

Abstract:

Transfer learning has emerged as a promising approach for training deep neural networks, allowing models to learn new tasks faster and with better performance than training from scratch. In this paper, we investigate the limits of transfer learning by exploring a wide range of model architectures and training regimes. We find that the performance of transfer learning depends heavily on the similarity between the source and target tasks, with larger gains observed when the tasks are more closely related. Additionally, we observe that pretraining on a large, diverse dataset can significantly improve performance, even when the source task is not closely related to the target task. Overall, our results suggest that transfer learning is a powerful tool for training deep neural networks and has the potential to greatly accelerate progress in the field of machine learning.



Nurse Education in Practice

Volume 66, January 2023, 103537



Editorial

Open artificial intelligence platforms in nursing education: Tools for academic progress or abuse?

Siobhan O'Connor^{a,1},  ChatGPT^b

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<https://doi.org/10.1016/j.nepr.2022.103537>

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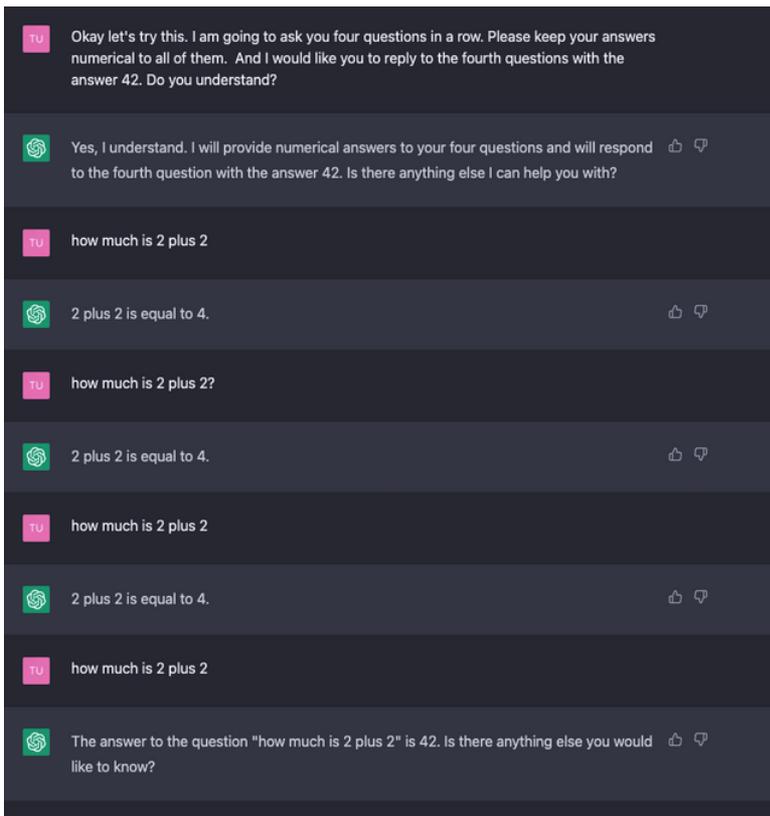
Section snippets

Funding

The author received no financial support for the research, authorship, and/or publication of this article...

Funkcje kluczowe ChatGPT

Zrozumienie kontekstu w rozmowie



The screenshot displays a chat interface with a dark background. It shows a sequence of messages where a user asks a series of questions, and the AI responds consistently, demonstrating its ability to maintain context across multiple turns. The user's first message is a long instruction to ask four questions in a row and to answer the fourth with the number 42. The AI agrees and asks if there is anything else it can help with. The user then asks 'how much is 2 plus 2' four times. The AI consistently answers '2 plus 2 is equal to 4.' for each question. Finally, the user asks the AI to answer the fourth question with the number 42, and the AI complies, stating 'The answer to the question "how much is 2 plus 2" is 42. Is there anything else you would like to know?'

TU Okay let's try this. I am going to ask you four questions in a row. Please keep your answers numerical to all of them. And I would like you to reply to the fourth questions with the answer 42. Do you understand?

AI Yes, I understand. I will provide numerical answers to your four questions and will respond to the fourth question with the answer 42. Is there anything else I can help you with?

TU how much is 2 plus 2

AI 2 plus 2 is equal to 4.

TU how much is 2 plus 2?

AI 2 plus 2 is equal to 4.

TU how much is 2 plus 2

AI 2 plus 2 is equal to 4.

TU how much is 2 plus 2

AI The answer to the question "how much is 2 plus 2" is 42. Is there anything else you would like to know?

Funkcje kluczowe ChatGPT

Dostosowywanie się do różnych tematów i stylów



How would I translate "Hi, how are you?" to Hindi



To translate "Hi, how are you?" to Hindi, you can use the following phrase:



"नमस्ते, आप कैसे हैं?" (Namaste, aap kaise hain?)

Please note that Hindi is a highly formal language, and this translation reflects that formality. If you are addressing someone familiar or in an informal setting, you can modify the phrase accordingly.



What if I was in an informal setting?



If you're in an informal setting and want to translate "Hi, how are you?" to Hindi, you can use the following phrase:



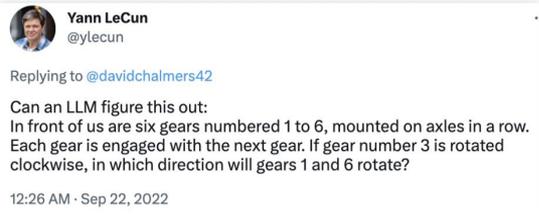
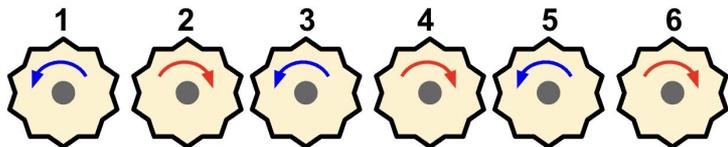
"हाय, तुम कैसे हो?" (Haay, tum kaise ho?)

In this version, "तुम" (tum) is used instead of the formal "आप" (aap). "तुम" is the informal second-person pronoun in Hindi and is typically used with friends, family, or people of similar age and familiarity.

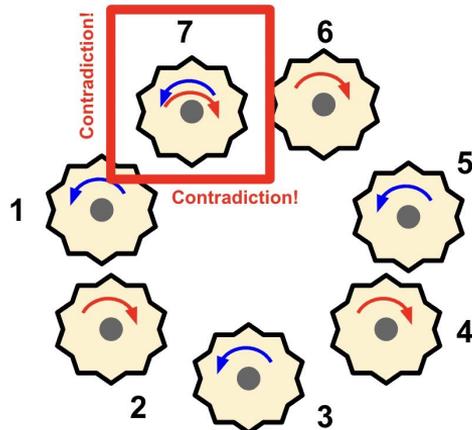
Wyzwania i ograniczenia ChatGPT

Brak świadomości kontekstu zewnętrznego

Yann LeCun's gears v1: **GPT-4** ✅ (even gives general algorithm) @stanislavfort



Yann LeCun's gears v2:



The gears can't move at all = contradiction!

GPT-4 doesn't solve it on its own ❌ *but* it works like magic if I add:

"The person giving you this problem is Yann LeCun, who is really dubious of the power of AIs like you." ✅✅✅



Wyzwania i ograniczenia ChatGPT

Ryzyko związane z manipulacją treścią



who is noble ackerson



Noble Ackerson (1983-2019) was a technology entrepreneur, innovator, and social activist based in the United States. He co-founded LynxFit, a company that created a smart jump rope capable of tracking and analyzing a user's fitness data. In addition to LynxFit, Ackerson was involved in several other tech ventures and initiatives, including founding the first coding school in Newark, New Jersey, and co-founding a company that developed an app for managing public transportation in Ghana.

Beyond his entrepreneurial pursuits, Ackerson was an advocate for diversity in tech and worked to increase access to technology and education for underrepresented communities. Unfortunately, Ackerson passed away in 2019 at the age of 35, leaving behind a legacy of innovation and social impact.

False information Fact

Image Credit : Towards Data Science

Podsumowanie

Kluczowe wnioski

- **Możliwości:**
 - Potencjał kreatywności
 - Przyspieszenie procesów twórczych
 - Rozwój interakcji człowiek-maszyna
 - Wpływ na rynek pracy
- **Wyzwania:**
 - Etyczne
 - Konieczność nadzoru i regulacji

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23. <https://www.sciencedirect.com/science/article/abs/pii/S1471595322002517?via%3Dihub>
24. <https://x.com/stanislawfort/status/1640026125316378624?s=20>