



**GNIST**  
+  
**soco**

**Thommy  
Bommen**  
+  
**Audun  
Urke**



# Topics

- Generative AI
  - Min egen reise
  - Teknologien
  - Ting å tenke på
- 
- Praktisk bruk av ChatGPT og testing



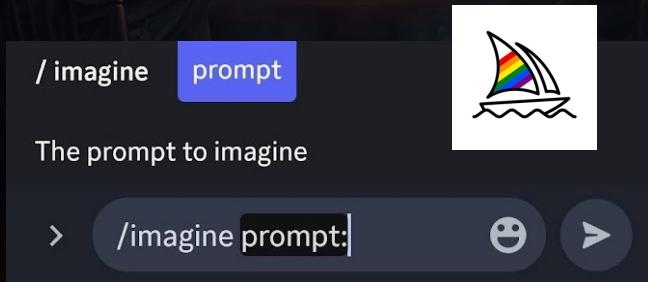
a road, strategy, goal, generative ai, machine learning

# Generative artificial intelligence

Generative artificial intelligence or generative AI is a type of artificial intelligence system capable of **generating text, images, or other media in response to prompts.**

Wikipedia







A close-up portrait of a columbian drug lord, his face etched with lines of concentration as he looks towards the camera. The background is a soft blur of lush greenery, focusing all attention on the man. The image should have a warm, nostalgic feel, reminiscent of old film photography. –ar 4:5 – v 5.1 –style raw

•GNIST•

# Min reise

AI på fritiden?

- Grafisk AI
- Underholdning og parodi
- ChatGPT



Model: Default (GPT-3.5)

 could you generate a google map url for these coordinates?  
latitude is 58.4 degrees N, and longitude is 15.5 degrees E

 Sure, here is the Google Maps URL for the coordinates you provided:

<https://www.google.com/maps?q=58.4,15.5>

This link will take you directly to the location on Google Maps.

# Ned i kaninhullet

AI på jobb?

- Koding
- Skrive tekst
- Oversette
- Etiske grenser

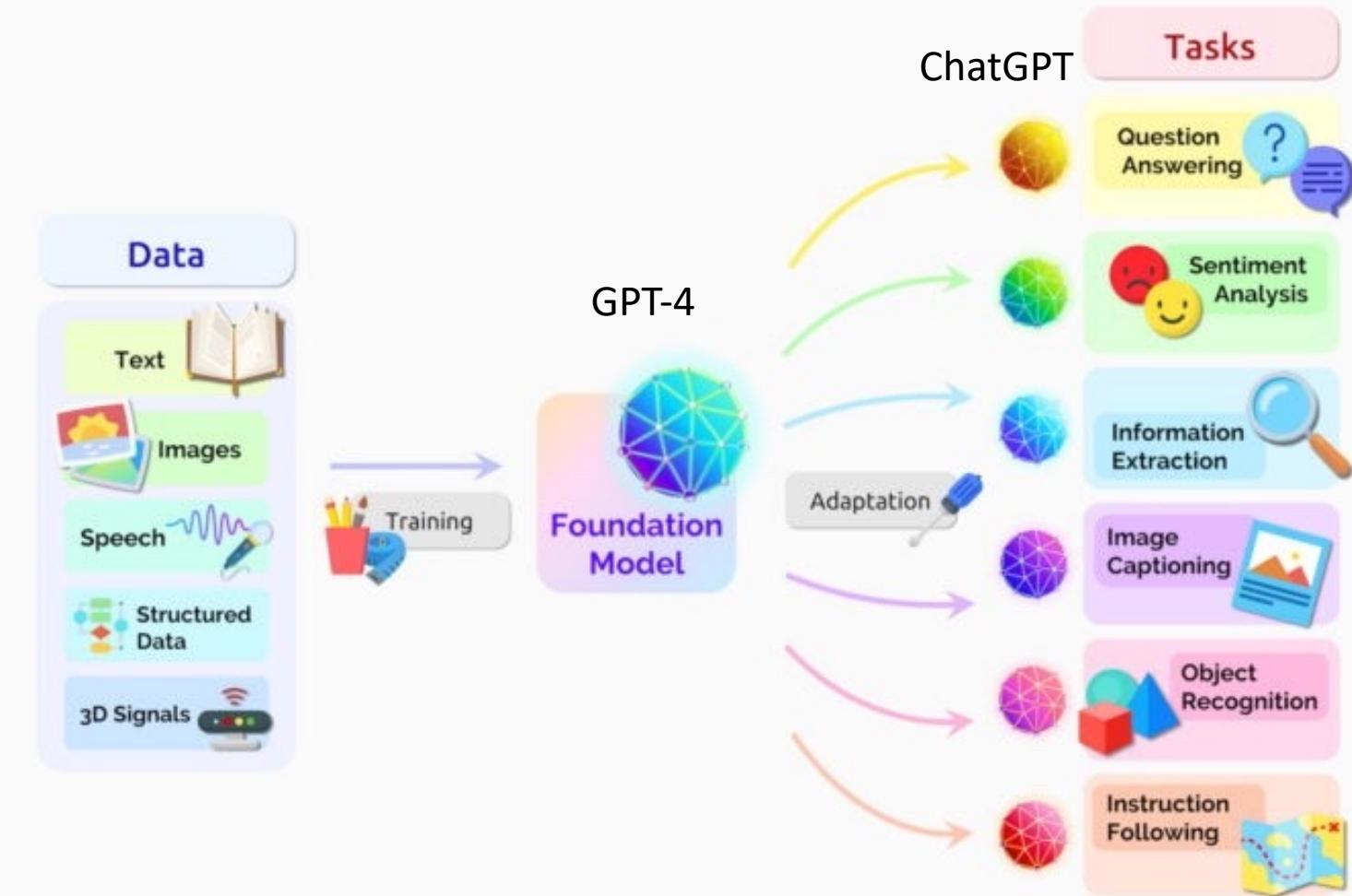


Midjourney: A rabbit and a rabbit hole, ultrarealistic --ar 1:1

# Ned i kaninhullet

Hvordan fungerer det hele?

- Large Language Model (LLM)
- Nevrale nettverk
- Transformer



# Nevrale Nettverk

Pre 2017:

CNN – Convolutional neural network

- egnet for romlig data som bilder

RNN – Recurrent neural network

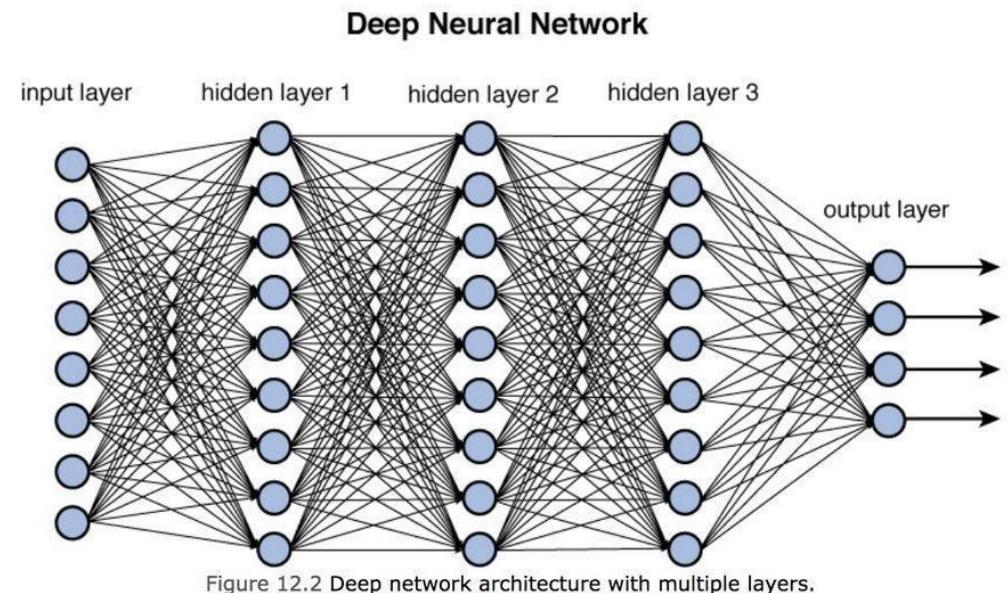
- egnet for tidsdata, også kalt sekvensielle data

Måtte læres opp med store merkede datasett.

The sky is blue  
weather

Post 2017: Transformers finner mønster matematisk uten merking av datasett

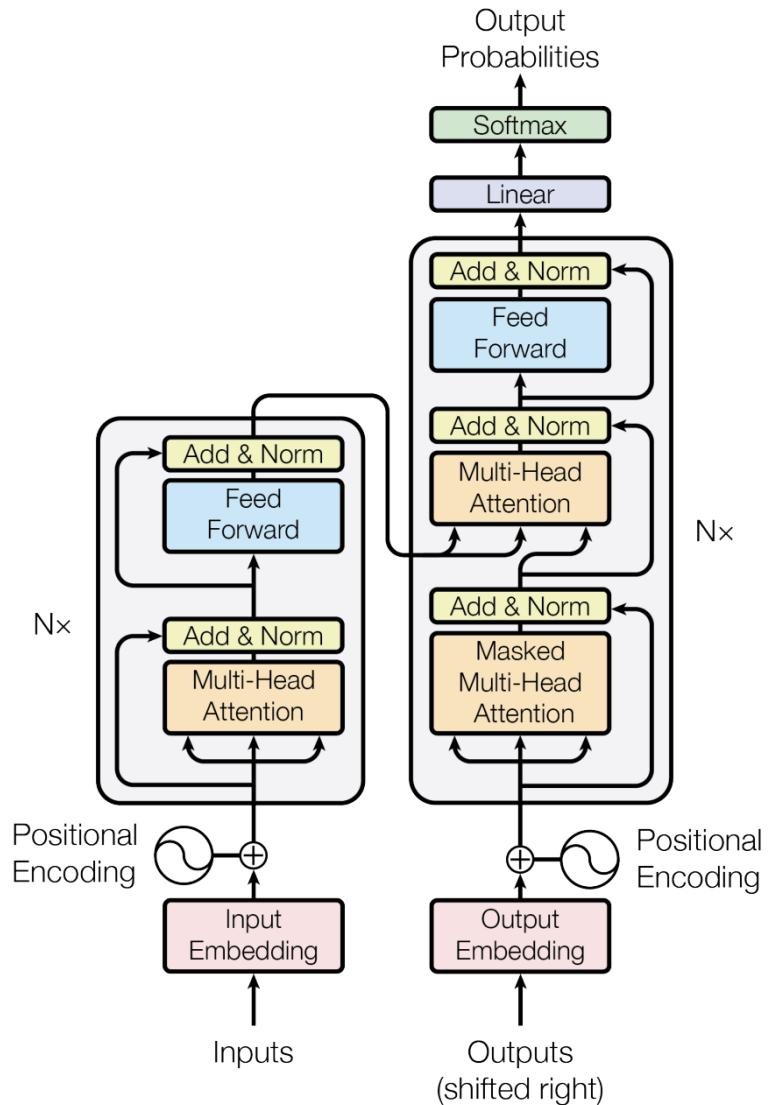
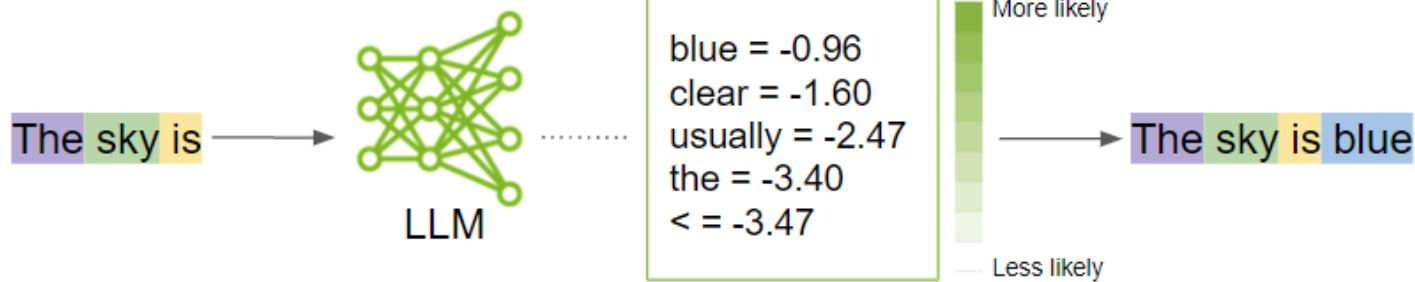
- Rå data fra internett, bøker, dokumenter etc.



# Transformer

All you need is attention (Google 2017) -  
<https://arxiv.org/abs/1706.03762>

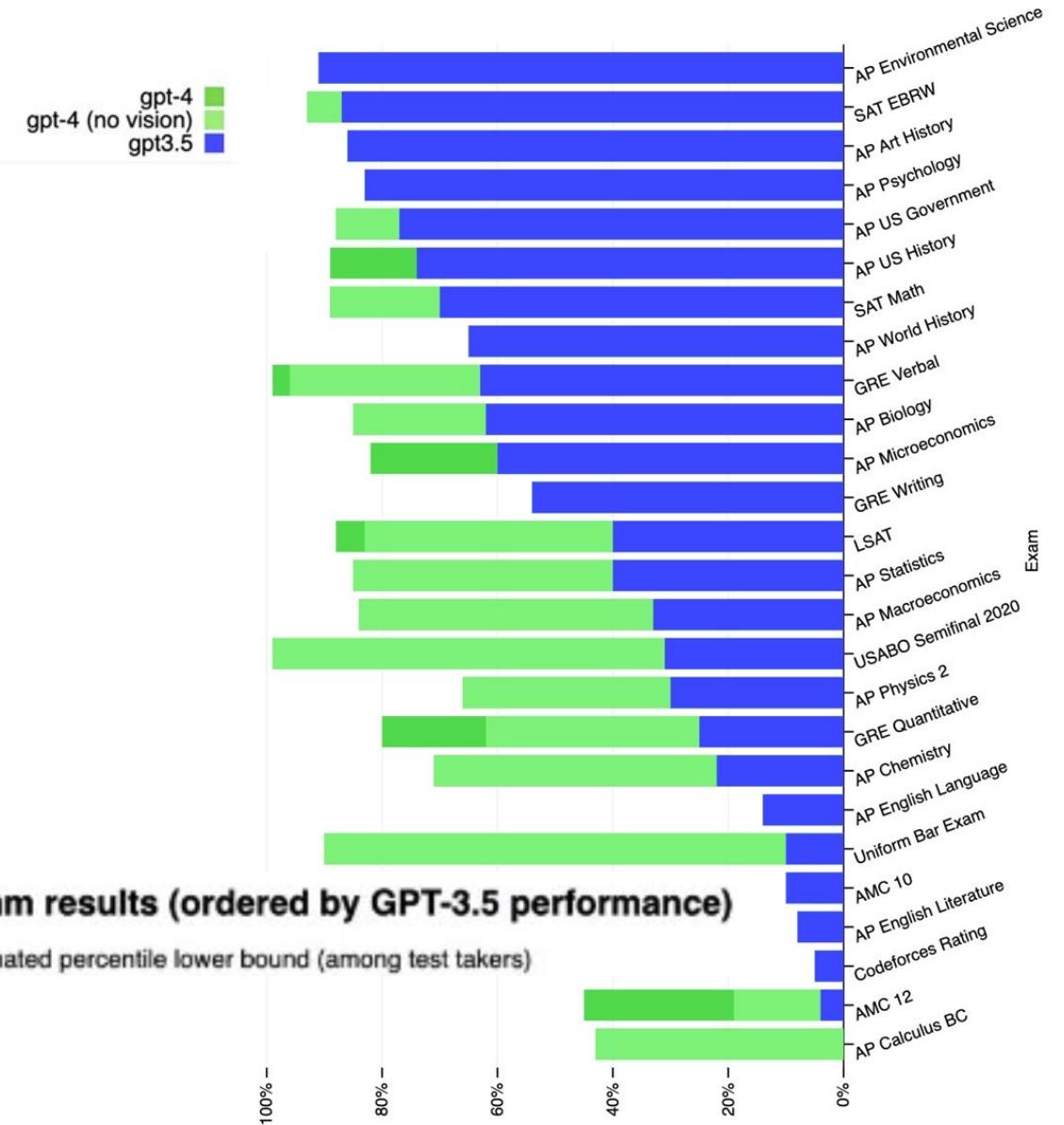
Ord i en setning har en posisjon og en verdi (vektor) og en «awareness» omkring seg selv



# Ting å tenke på...

Store språkmodeller kan benyttes til så mye mer enn hva vi ser i dag, og den er...

**utrolig god til å gjette på hva den tror  
du forventer den skal si**



**Exam results (ordered by GPT-3.5 performance)**

Estimated percentile lower bound (among test takers)

# Fakta?

Model: GPT-4

 is there an L in Sweden and Germany

< 2 / 2 >  It seems that you are asking about the presence of the letter "L" in the names of the countries Sweden and Germany. Yes, the letter "L" appears in both names:

- Sweden: It appears as the second last letter in the name.
- Germany: It appears as the fourth letter in the name.

?

# Prompt Engineering



is there an L in Sweden and Germany

Answer: Let's work this out in a step by step way to be sure we have the right answer



Sure, let's break it down step by step:

Step 1: Identify the country names

- Sweden
- Germany

Step 2: Examine each country name for the presence of the letter "L"

- Sweden: The letters in Sweden are S, W, E, D, E, N. There is no "L" in the name Sweden.
- Germany: The letters in Germany are G, E, R, M, A, N, Y. There is no "L" in the name Germany.

Answer: After carefully examining the country names, there is no "L" in either Sweden or Germany.

## Mangfold og AI

- 67% av Reddit-brukere i USA er menn, og 64% mellom 18 og 29 år
- Bidragsytere til Wikipedia: 8.8–15% er kvinner eller jenter
- Timing: Black Lives Matter endret mye av ordlyd og innhold på Wikipedia
- Hvordan kan vi være smarte ved bruk av AI?

<https://dl.acm.org/doi/pdf/10.1145/3442188.3445922>

Photo by [Roi Dimor](#) on [Unsplash](#)



Stochastic Parrots?

# Open Source LLM

- AI behøver ikke være en sort boks
- Flere modeller er åpen kildekode
- Tren din egen?



Hugging Face



## **Ingenting å være redd for. Vær nysgjerrig!**

Ligner et internettsøk, de som vet **hvordan de skal kommunisere med den får et bedre resultat...**

Du kan ikke stole på alt den forteller deg, men den kan **hjelpe deg i en dialog omkring det du ønsker å få til...**

Hvordan kan vi bruke den i testing?