Artificial Intelligence

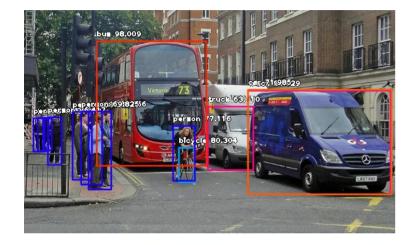
New capacities and challenges for society and teachers

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Advances in Machine Learning



Inputs

Input Once upon a time,

> Text Generation Model

Output

Output

Once upon a time, we knew that our ancestors were on the verge of extinction. The great explorers and poets of the Old World, from Alexander the Great to Chaucer, are dead and gone. A good many of our ancient explorers and poets have

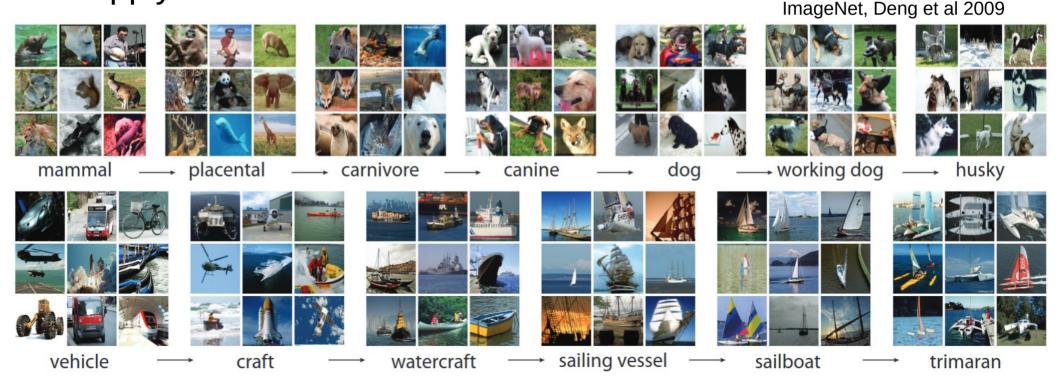


"A baby skiing down a steep, glaciated mountain and making a peace sign while jumping off a cliff"

> Huggingface Bing image creator / DALL-E

Method:

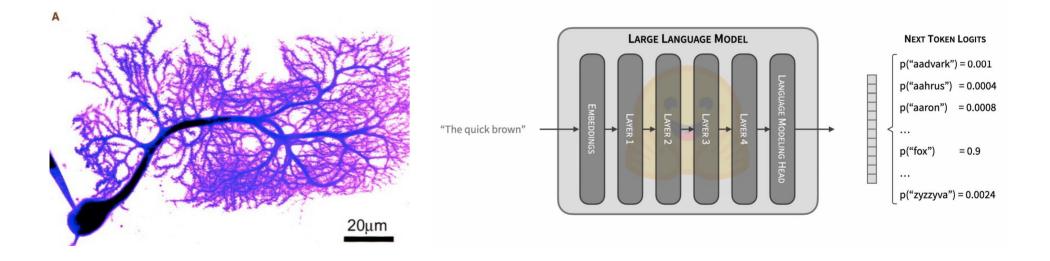
- Collect large dataset (e.g. images & labels)
- "Train" model to fit data
- Apply model to new data



Machine learning models

• Deep artificial neural networks

ideas go back to 1950s, big advances since 2012



Challenges

- Model is a "black box"
- Surprising fragility to some inputs/unreliable
- Societal implications
 - Obsolescence of jobs/skills that are easy for AI
 - Dangerous applications

Like lecture: https://www.channel1.ai/

- Models may reinforce biases

"Cheating" with a language model

How can I write a Python function to generate the nth Fibonacci number?

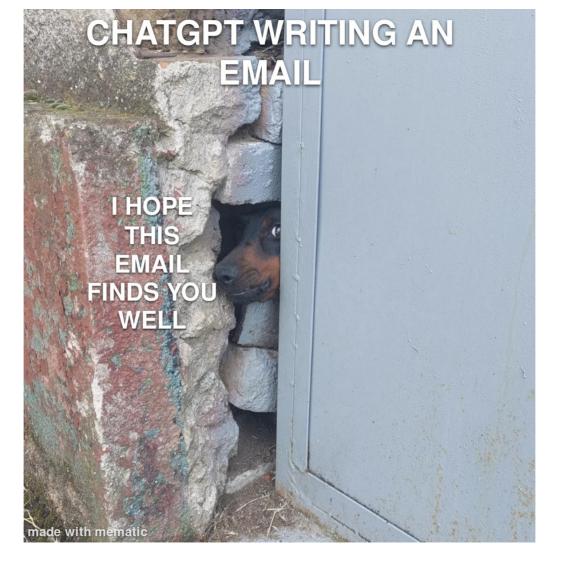
Here's an example of how you could implement a fibonacci generator in python:

```
def fib(n):
    if n <= 0 or n == 1:
        return n
    else:
        return fib(n-1) + fib(n-2)</pre>
```

This code defines a recursive function called fib that takes an integer argument, n. If n is less than zero or equal to one, it returns n. Otherwise, it calculates the sum of the first two fibonacci numbers and returns that value for n-1, then adds that value with the result from calculating the sum of the first two fibonacci numbers again for n-2, and so on until n=0. At this point, the function returns the accumulated values.

To use this function, you would call it like this:

fib5 = fib(5) # Returns 8
fib10 = fib(10) # Returns 55



https://www.reddit.com/r/ChatGPT/comments/14sekk8/accurate/