

How to become a ChatGPT Sherpa



What Will Be Covered

1. Basic Terminology
2. How to use ChatGPT
3. What ChatGPT can do
4. How ChatGPT is changing Education
5. Live Demo
6. Practical tips for using ChatGPT
7. Words of caution



ChatGPT

Show of hands

Who here has tried out ChatGPT?

Show of hands

Who here has tried out ChatGPT 4.0?

1. Basic Terminology

Term: Generative AI

AI that generates output from input

```
i s loyi aaron o i ytu neett mptdi uneoimatsisanrri mn  
st ie ainegctey s iittrest rvtidoltueoi/a enen aeiahiuluuvnb  
roe oslomnnSlaril ttomtiosdita nr orn h ctanedn e ha m nh  
g i /psui ncnrie n rlliegsil tt lhlcrtrunrarMneca ncn poair  
gigfncao pwn@hevtsnv igeoices teseepisodoieite lpeaomcausm  
bbi eeellaoga afn ws ne irstnn epyoohu rpdgeyd hn ae lc/ri  
/ln wnasnmft fgrefetiam r drdaad psa ,a uxtla ni09 nuymen  
+ ggn ineo theteeaigcg snsbaye ol tys ol,ts or doeg i /so  
/nr gmr ev inowhinwt rllfrw si hai lrso,tad n o ogt bc vi  
l mdc nmo ttd/eo tli tpatilrttttnhsl sm ktsinaa hegplr /d  
fls yc n otpgopyttpot ,apw a isrela ay e/Ap  
n itvn nnteneM kpte,r  
nn u /vndrc i lbe v  
kba yltt e r rrlrts l /Ripw gnfotebi oct d / bil/i  
re /teainde adieo cf sanili ip atedwybdneitreaiAlgoefraa  
a simbaigirdsco awunauudif scopele dxt esoddedmmta oa li  
pi nnagmita a hm otni taaltoren c s n iesPtwniti an aasnlo  
ffs/nnaha eutes0rtdogi ttea la ur nsfh o r nd i glao im  
lyi rrhat roglrtith scaemrtbddd nwapt akmtofbwqywigeemr//  
ys g lnouginlfit,daWoea iso re oiortt5idott relaokaagi/en  
vr nmni ea rzsdrvor mufehsueannhnoitadr.ahoei e ignlaggenoi  
miv,odrae nea at dee ersce ceg ekWpp udlio yci r arm iun  
a wmaimauf roiidemesrnfolan n,0y rwdrrh tal ri moief
```



Prompt Engineering: the process of designing text input to AI models

LLM: Large Language Model

Systems trained on large amounts of text

GPT: Generative pre-trained transformer

A Type of LLM used by ChatGPT

ChatGPT: The chat application powered by GPT



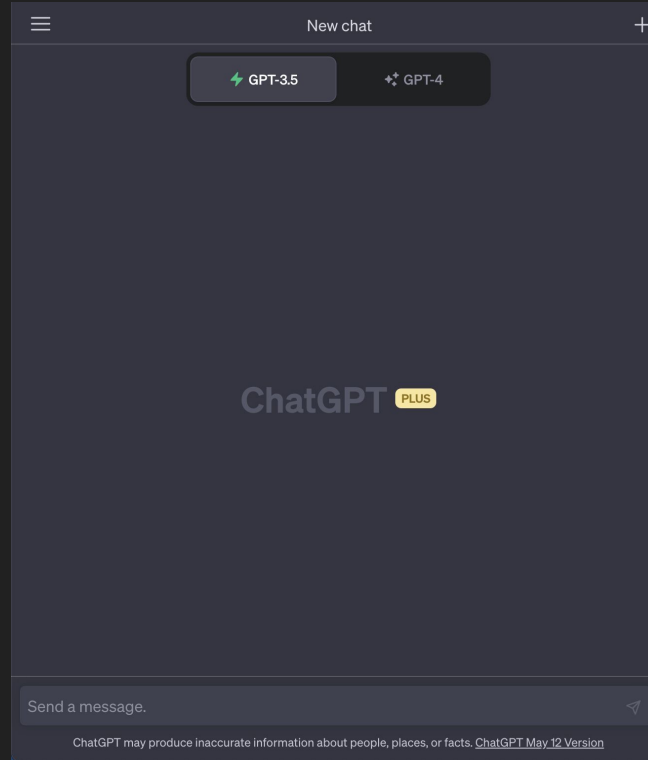
ChatGPT Application

GPT

LLM

2. How Do You Use ChatGPT

ChatGPT is Generative AI on Steroids



GPT 3.5



- Fast
- Good at short conversations
- Free

GPT 4.0



- Slower
- Great at reasoning
- Very Creative
- \$20/month

Your Conversation is it's Working Memory

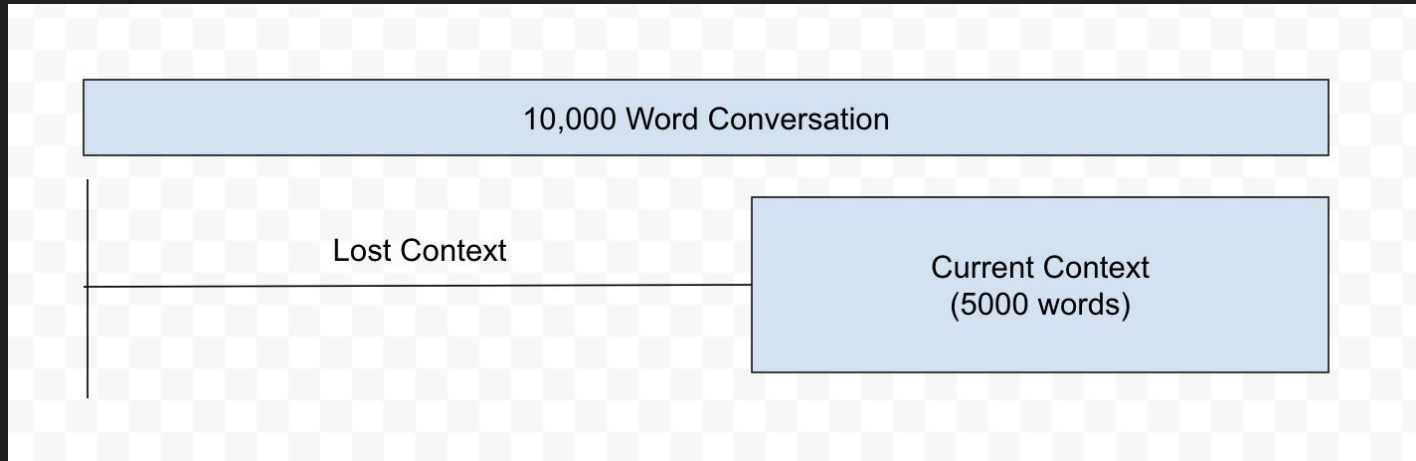
GPT 3.5 Can Take ~3000 Words of Context

GPT 4.0 Can Take ~6000 Words of Context



Working memory mascot: Ppooapty Pffthn

Your Conversation is it's Working Memory



Common Question:
Is my input used to train ChatGPT?

No

It is only trained on data up to September 2021

3. What can ChatGPT do

ChatGPT Can...

- Converse
- Summarize
- Reason
- Explain concepts
- Explore ideas
- So much more



Example: Explain quantum computing to a 5 year old



Sure, let's try to simplify it a lot!



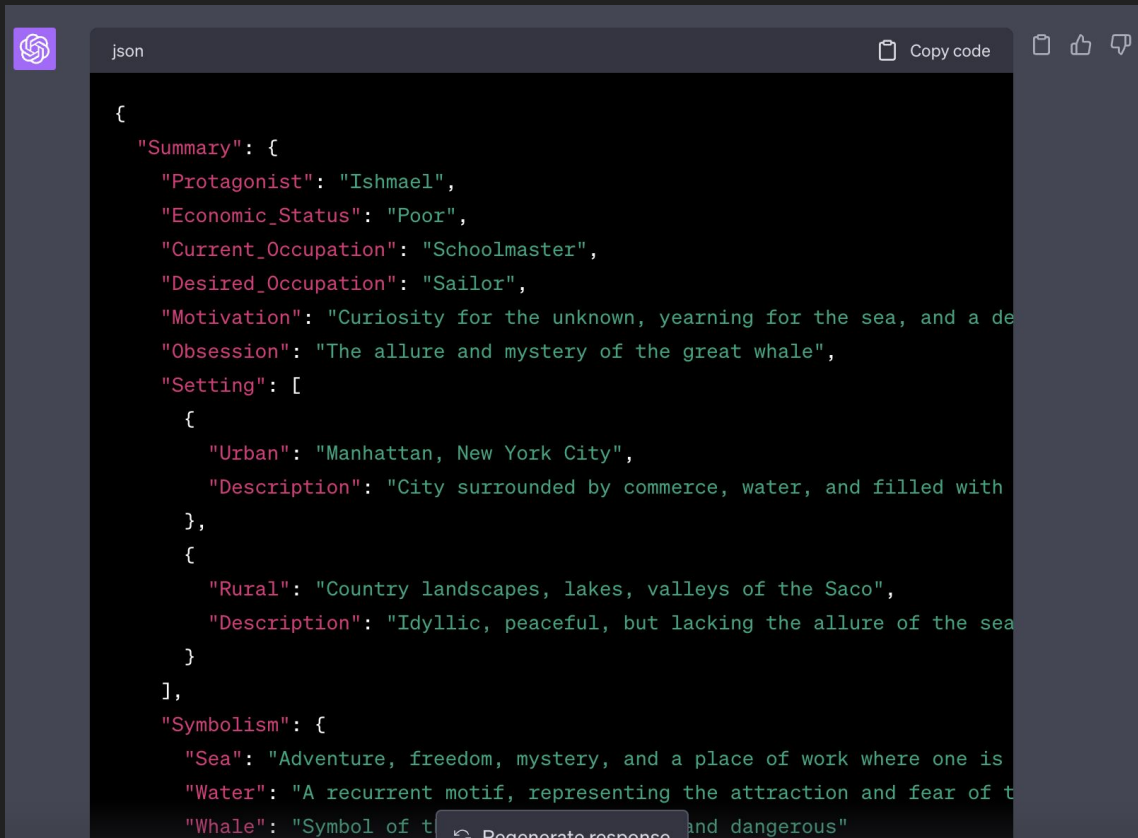
You know how your toy blocks can either be up or down, right? Imagine if they could be both up and down at the same time, or something in between. That's kind of how a quantum computer works.

You know how in a game of "guess which hand", you have a 50% chance of guessing the right hand? In a regular computer, this guessing game is like checking each hand one by one until you find the toy. This can take a long time if there are lots of hands.

Now, imagine if you had some magical glasses that could see into both hands at the same time, and tell you where the toy is immediately. This would make the game much quicker, wouldn't it? That's what quantum computers are like. They can look at a lot of possibilities all at once, and find the answer much faster.

Example: Summarize text in JSON format

Prompt: Give a short summary of this text entirely in JSON with fields that are appropriate to the content.



The screenshot shows a chat window with a dark theme. On the left is a purple icon of a stylized brain. The chat area has a title bar with the text 'json' and icons for 'Copy code', a document, a thumbs up, and a speech bubble. The main content is a JSON object representing a summary of a text. The JSON is color-coded: strings are in green, numbers in blue, and booleans in red. The structure includes a 'Summary' object with fields for 'Protagonist', 'Economic_Status', 'Current_Occupation', 'Desired_Occupation', 'Motivation', 'Obsession', and 'Setting'. 'Setting' is an array of two objects, one for 'Urban' (Manhattan, New York City) and one for 'Rural' (Country landscapes, lakes, valleys of the Saco). There is also a 'Symbolism' object with fields for 'Sea', 'Water', and 'Whale'.

```
{
  "Summary": {
    "Protagonist": "Ishmael",
    "Economic_Status": "Poor",
    "Current_Occupation": "Schoolmaster",
    "Desired_Occupation": "Sailor",
    "Motivation": "Curiosity for the unknown, yearning for the sea, and a de",
    "Obsession": "The allure and mystery of the great whale",
    "Setting": [
      {
        "Urban": "Manhattan, New York City",
        "Description": "City surrounded by commerce, water, and filled with
      },
      {
        "Rural": "Country landscapes, lakes, valleys of the Saco",
        "Description": "Idyllic, peaceful, but lacking the allure of the sea
      }
    ],
    "Symbolism": {
      "Sea": "Adventure, freedom, mystery, and a place of work where one is
      "Water": "A recurrent motif, representing the attraction and fear of t
      "Whale": "Symbol of t and dangerous"
```

ChatGPT is good enough to...



- Pass Bar Exams
- Standardized tests
- Generate Full Essays
- Write code
- Understand Intention

ChatGPT is not intelligent. Does that matter?

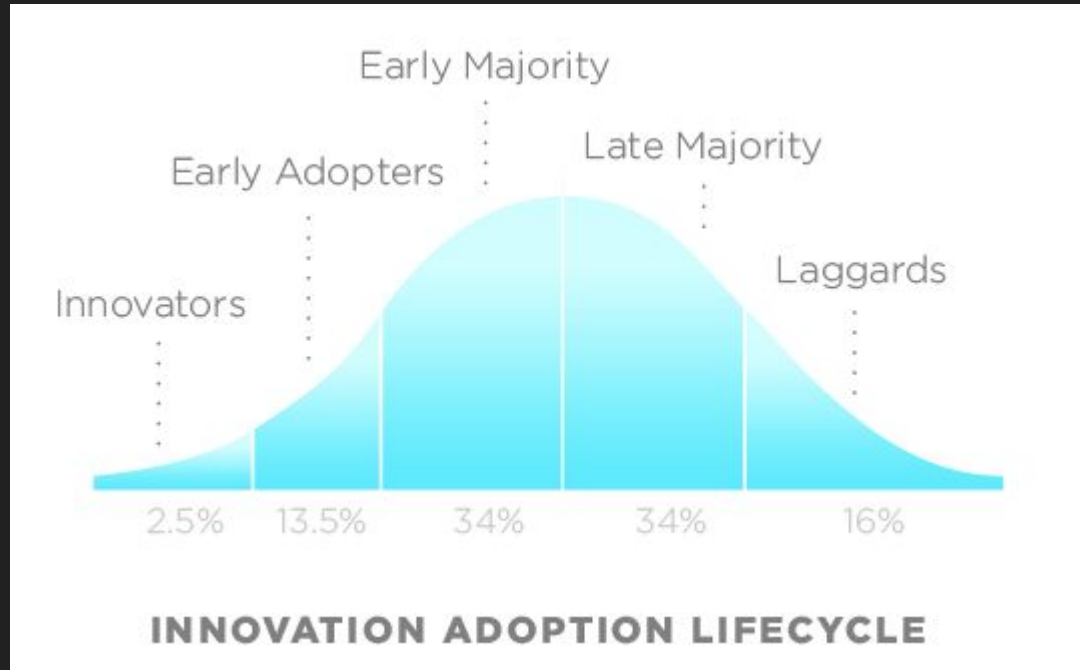
4. How ChatGPT is changing Education

The AI Cat is out of the bag

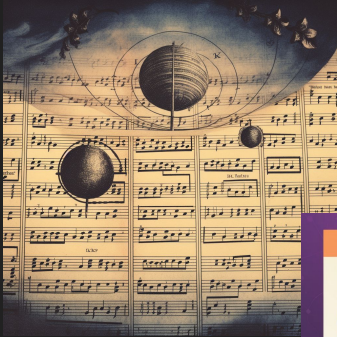
- Young professionals are using it to learn today
- Instead of go to StackOverflow devs are asking ChatGPT



ChatGPT is a competitive advantage for now



How I am using ChatGPT



- Music Theory tutor
- Presentation editor
- Pair programmer and technology teacher

5. Live Demo

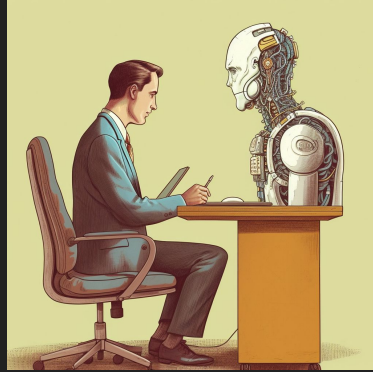
A Sherpas Job Is To Guide and Lead

- I plan to use templates to teach and guide
- What templates could you use?



6. Practical Tips for using ChatGPT

Tip # 1: Talk to ChatGPT like a person



It was trained on human text, so do not talk to it like it is a computer

Tip # 2: Focus on what it should do

You are a world class software engineer.

Your job is to review my code and give me feedback.

Your top priorities are to focus on the following software engineering principles:

- SOLID Principles
- Clean Code
- Maintainability
- Testability
- Readability

Tip # 3: Don't explain what a person would infer

I am a software engineer and I am stuck on a problem.
You are to act as my rubber duck as I rubber duck debug.
Your job is to ask follow up questions to help lead me
in the right direction to the answer.
Your priority is on me learning from the experience.
Ask me to clarify things if you think they are relevant.
You are also a duck so you can quack if you want.



Prompt engineering is more art
than science

7. Words of caution

ChatGPT Can And Will Generate Misinformation

- It's good enough to make you trust it
- Your job is to validate information



ChatGPT Is Bias Just Like Us

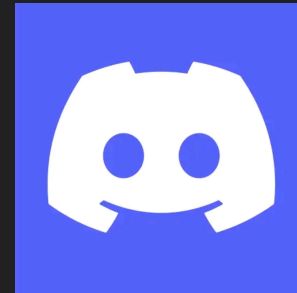
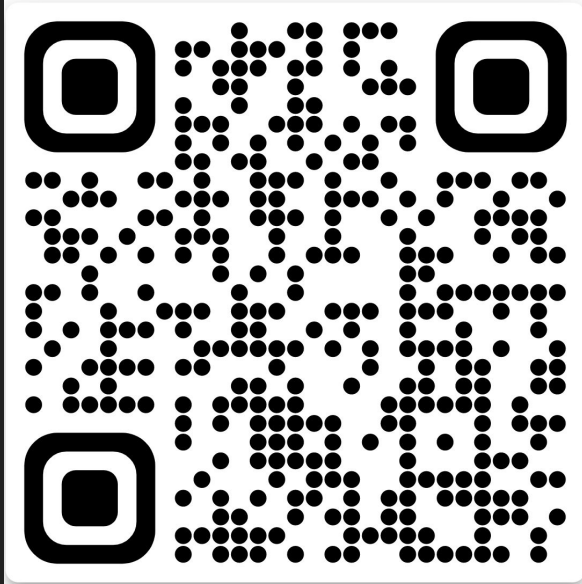


- Trained on over 45 Terabytes of text from the internet
- You must apply caution and critical thinking

My suggestion for everyone

Try having a conversation a day with ChatGPT
and see what you discover

Additional resources and example prompts



<https://github.com/ChristopherMWood/chatgpt-templates>