



## Al for research and education

Dr. Ronit Rozenszajn



## What is the difference between Google, Narrow AI and Large Language Model?

Google Narrow Al **Chat GPT** (Generative Pre-trained Transformer) Search engine Specific task Al language model

Enter: key words. Enter: prompt about an Image

Get: web pages Get: An Image Enter: A prompt

Get: various language-related tasks

# Artificial intelligence is a natural language model

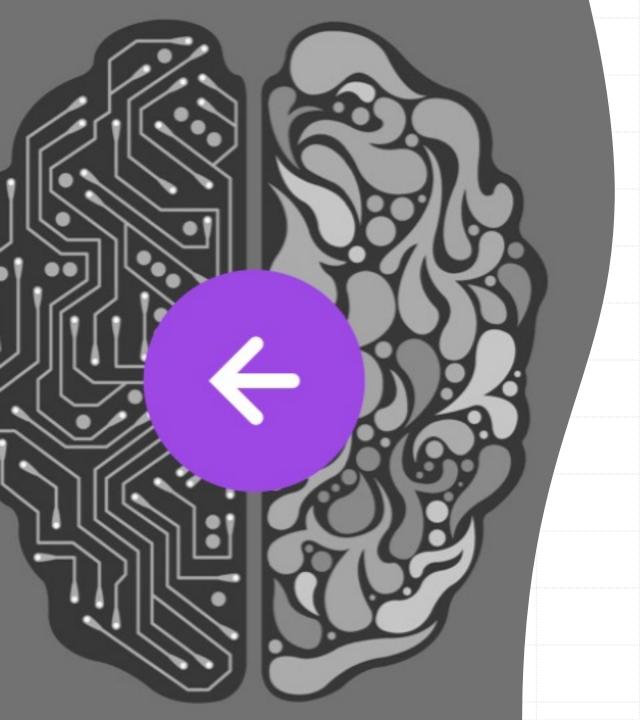
therefore, you need to "talk" to it.

You are together in this journey



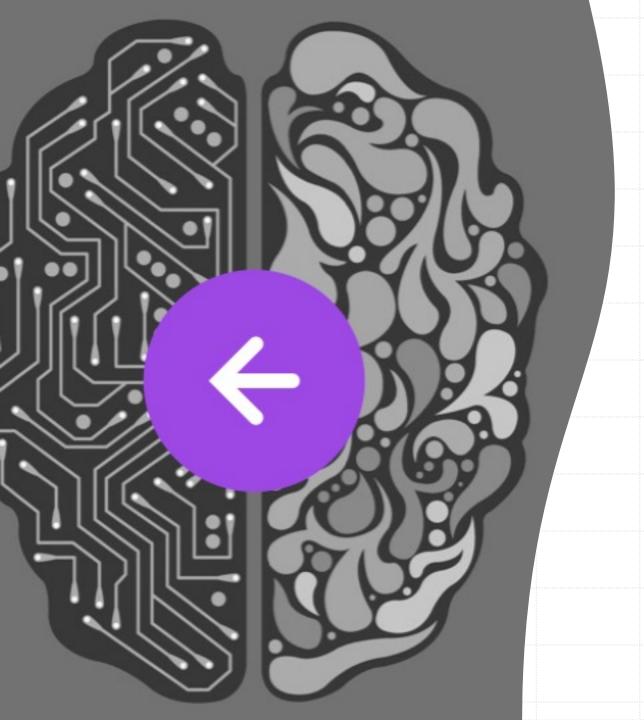
## The right prompt





A prompt is the only input the system receives from the user;

it cannot read minds.



Who are you (context)?

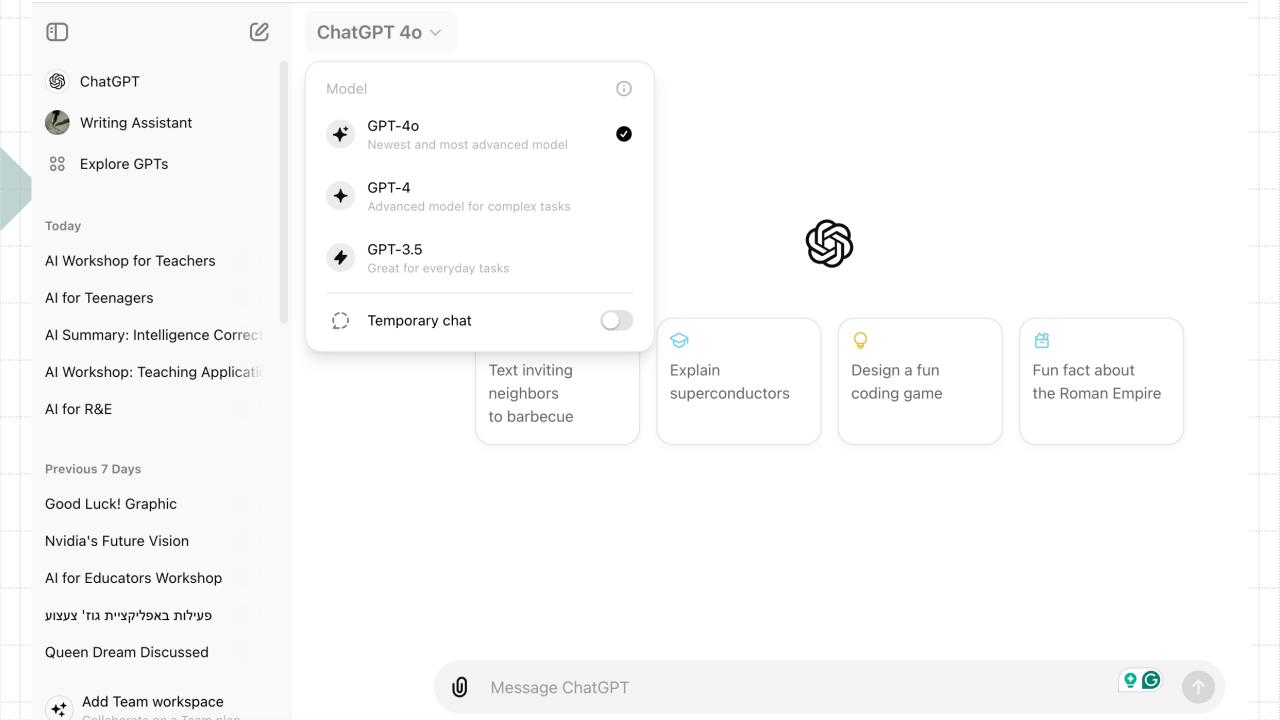
What is the purpose?

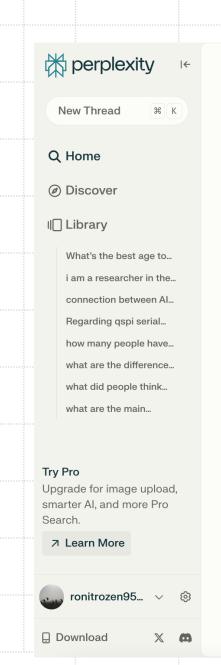
What is the expected result?

Key words

Let's start learning together Al tools

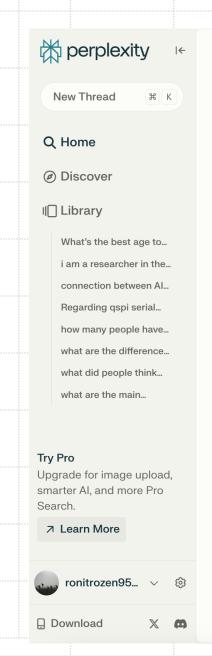


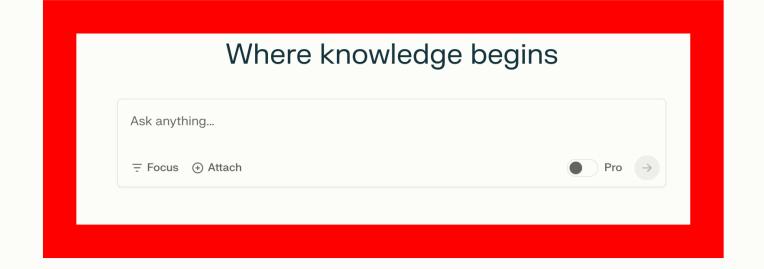




## Where knowledge begins

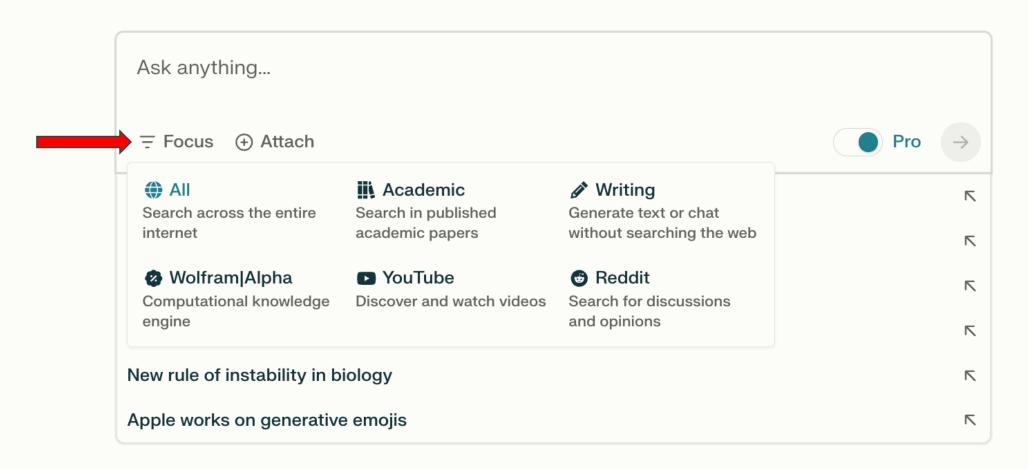
Pro Enterprise Playground Blog Careers English (English) v



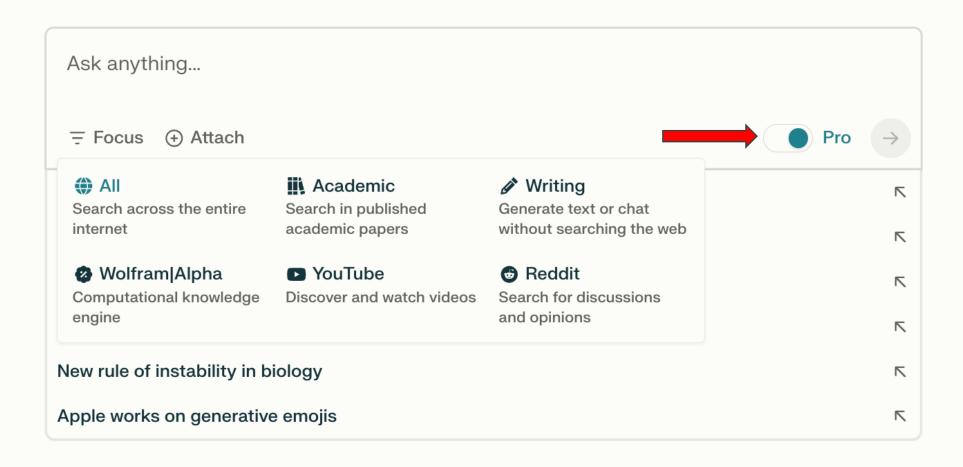


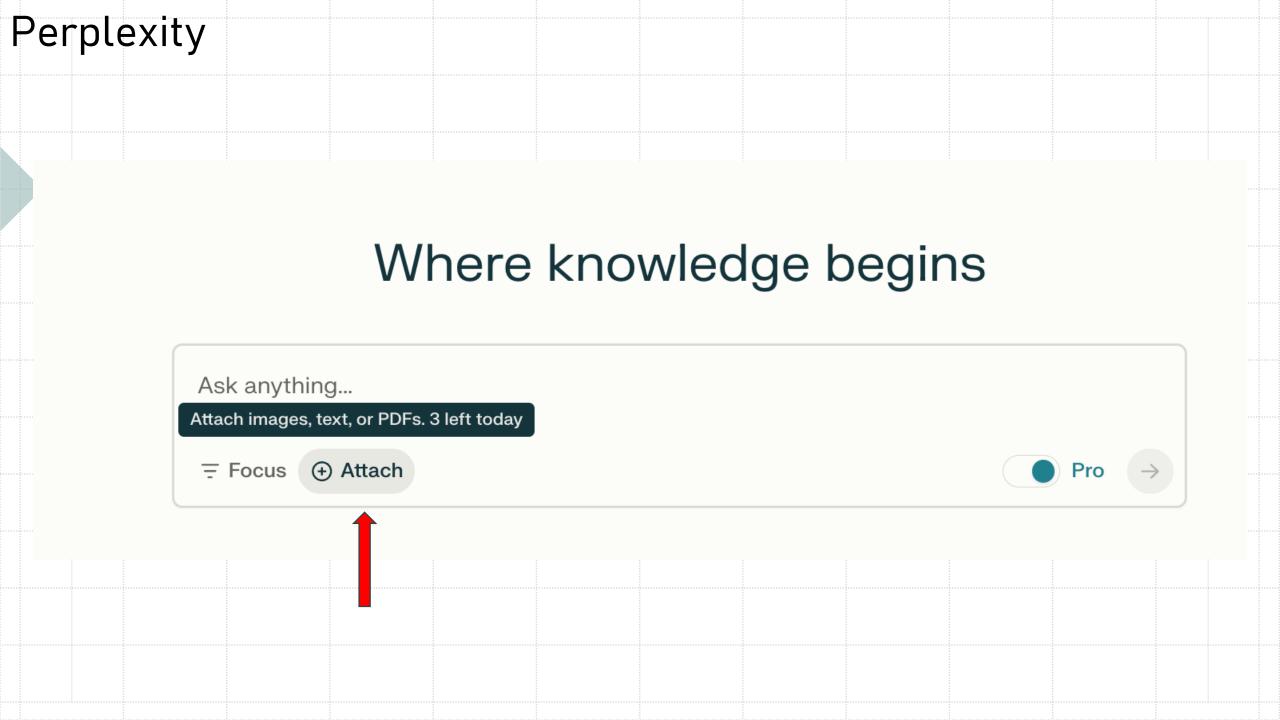
Pro Enterprise Playground Blog Careers English (English) v

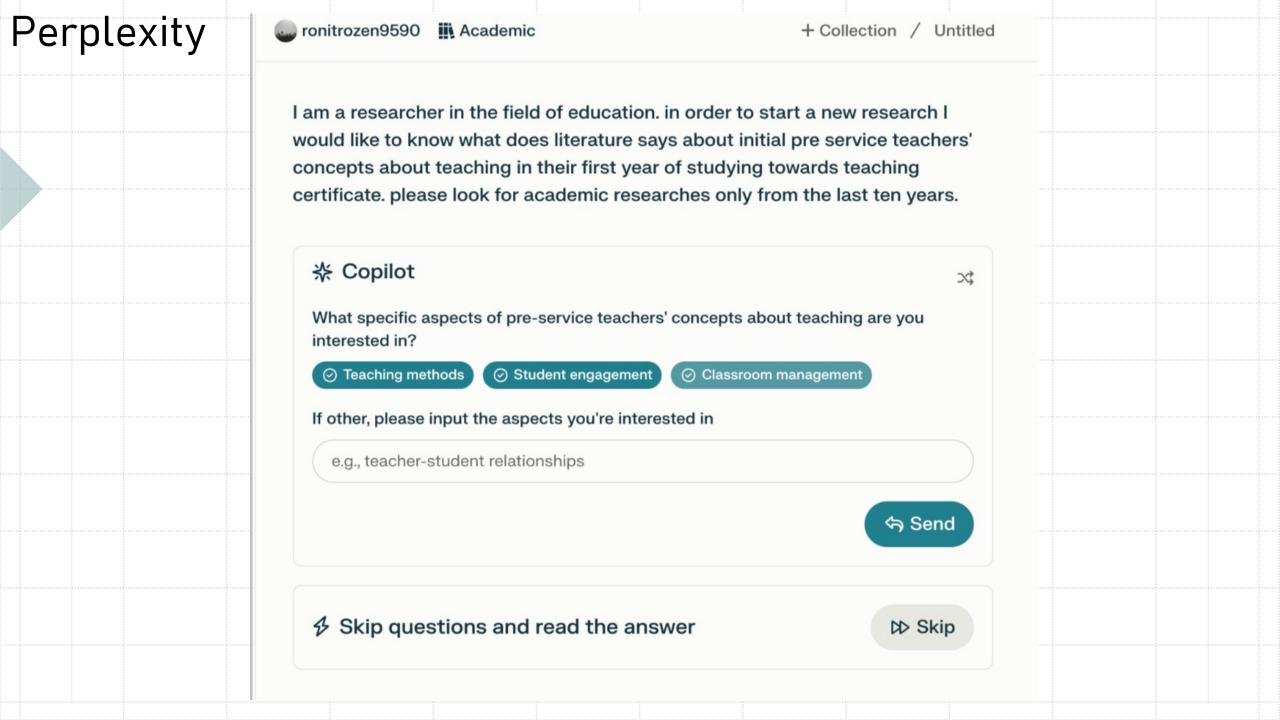
## Where knowledge begins

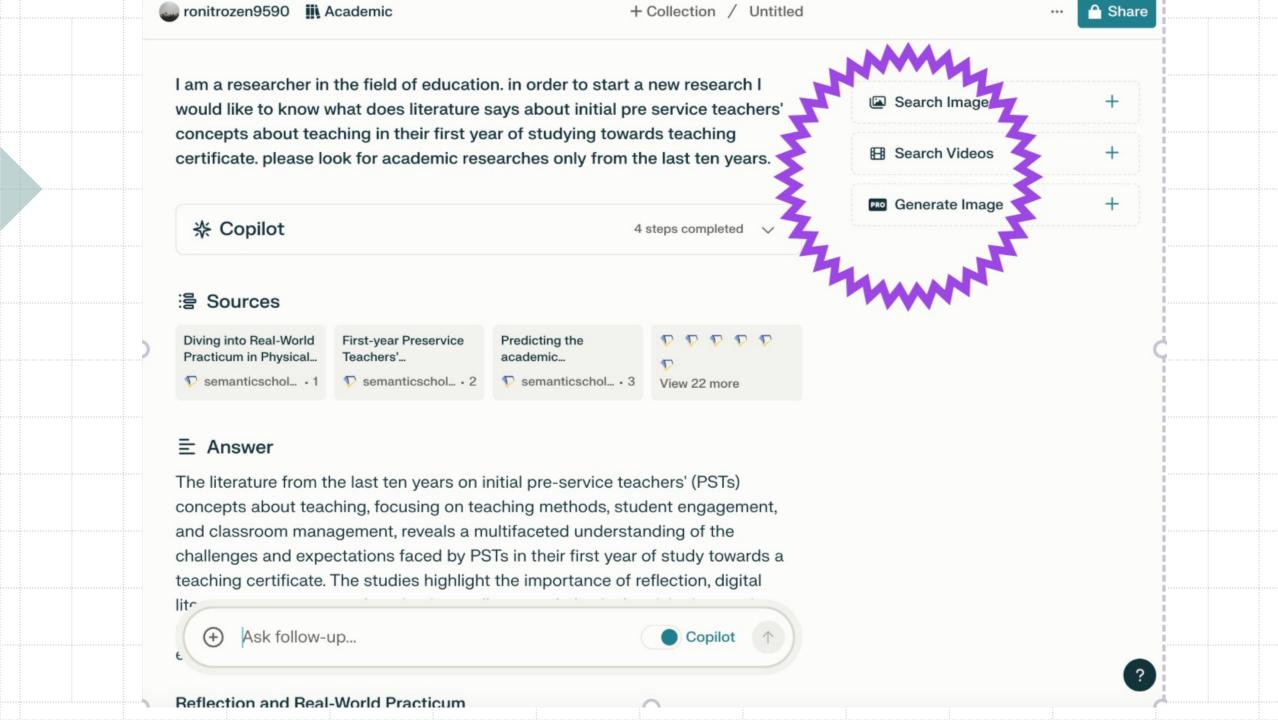


## Where knowledge begins











**New Thread** 

₩ K

Q Home

Discover

#### ∥ Library

what are the best and...

What's the best age to...

i am a researcher in the...

connection between Al...

Regarding qspi serial...

how many people have...

what are the difference...

what did people think...

#### Try Pro

Upgrade for image upload, smarter Al, and more Pro Search.

∠ Learn More



ronitrozen95... ∨





#### Musk's xAl Raised \$6B

Elon Musk's artificial intelligence startup, xAI, has raised an impressive \$6 billion in a Series B funding round, positioning the company to compete with...



#### **DDoS Attack on Internet Archive**

The Internet Archive, a digital library known for its Wayback Machine service, recently fell victim to a distributed denial-of-service (DDoS) attack. The incide...



#### **GPT-4 Beats Analysts at Earnings Forecast**

A groundbreaking study by researchers at the University of Chicago has revealed that OpenAI's GPT-4 can outperform human analysts in predicting...

⊚ 4,580 ¥ 305 🕓 13 hours ago



#### **Crows Count Using Vocalizations**

Crows, known for their intelligence, have recently been discovered to possess a remarkable ability: they can count out loud using vocalizations. This...



#### New Rule of Instability in Biology

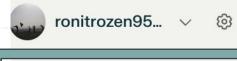
A new biological law proposed by USC molecular biologist John Tower suggests that instability, rather than stability, may be a fundamental...

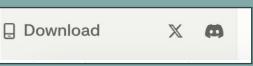
i am a researcher in the...
what are the best and...
What's the best age to...
connection between Al...
Regarding qspi serial...
how many people have...
what are the difference...
what did people think...

#### Try Pro

Upgrade for image upload, smarter Al, and more Pro Search.

∠ Learn More





#### : Sources

APA Format & APA Citation Generator -...

citationmachine • 1

The Most Important Qualities That Make a...

T teachersoftomor... • 2

[PDF] A Good Teacher in Every Classroom - ERIC

files.eric • 3





#### Introduction

The initial perspectives of student teachers as they embark on their journey towards obtaining a teaching certificate are critical in shaping their professional identity and effectiveness in the classroom. This systematic review aims to synthesize academic papers that explore these perspectives, focusing on the tacit knowledge that student teachers possess or develop in the early stages of their teacher education. Tacit knowledge, often understood as the implicit knowledge that individuals acquire through experience and that is difficult to articulate, plays a significant role in the teaching



### Methodology

## What should I use Perplexity for?

## Answering questions

From basic facts to tough questions—and get answers from up-to-date sources. Create code, summarize articles, or emails—all in one place.

## Organizing your Library

Organize your **Threads** in Perplexity Collections by project or topic. Invite contributors and easily switch privacy settings.

## Exploring topics in depth

**Perplexity's Copilot** feature provides a guided Al search experience, allowing you to explore topics in depth and learn new things.

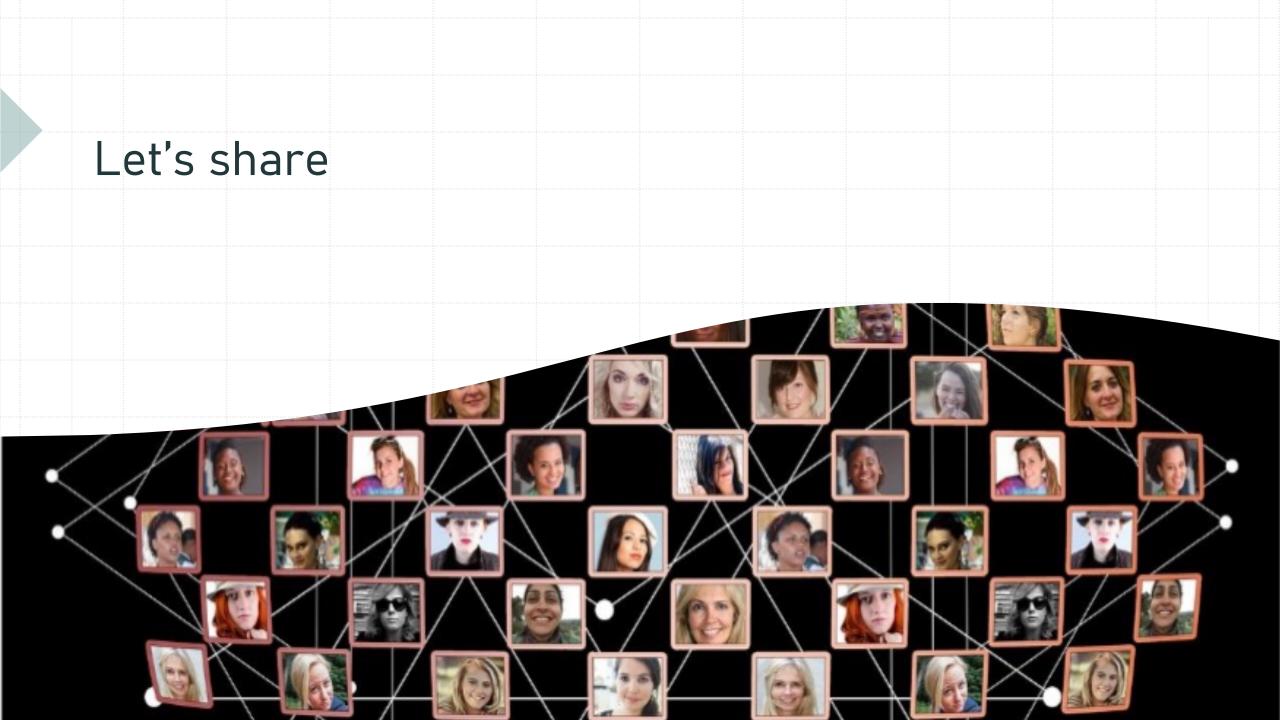
## Interacting with your data

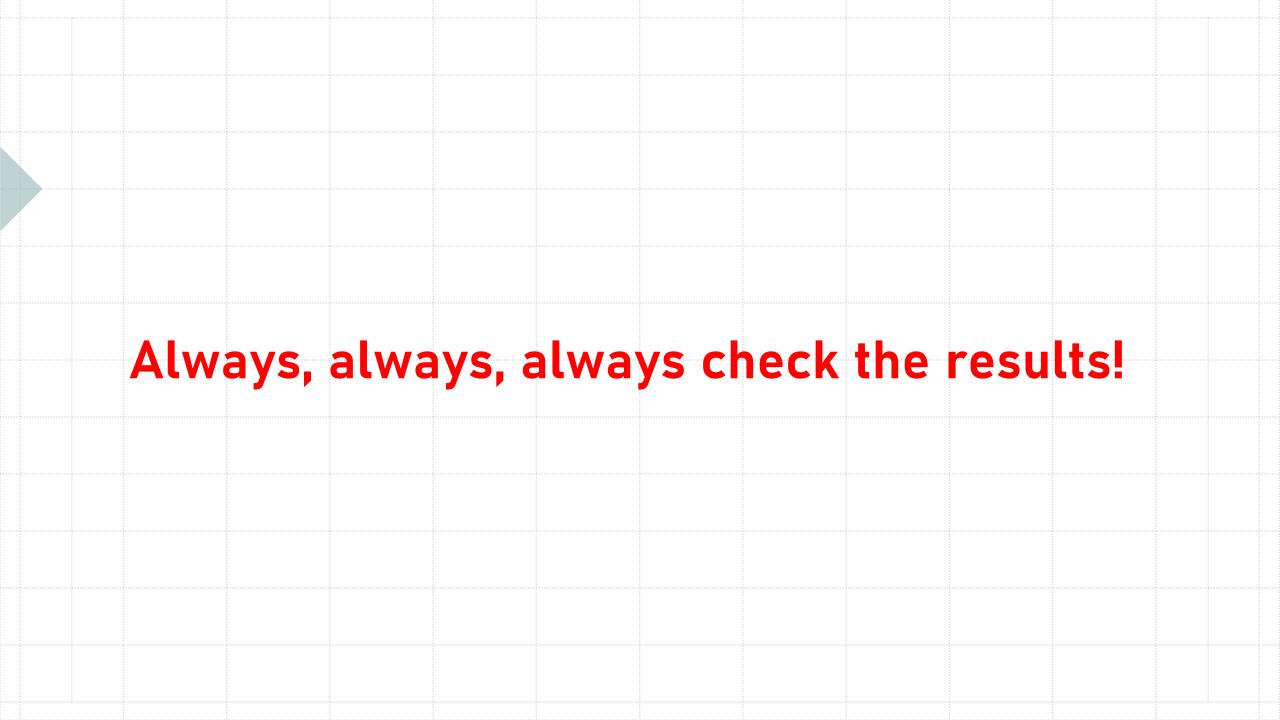
Ask questions about **your files** and search the web, all without leaving the platform. Get a complete project view in one space.

## Pair practice in breakout rooms

- Agree on a subject you want to explore
- individually write a prompt related to the chosen topic without sharing it with your partner.
- compare the AI-generated responses
- compare the images generated based on each prompt
- Compare your prompts
- How did the quality and specificity of the prompts affect the AI-generated text responses and image results?







## **CLAUDE.AI**



A۱

What can I help you with?

Claude

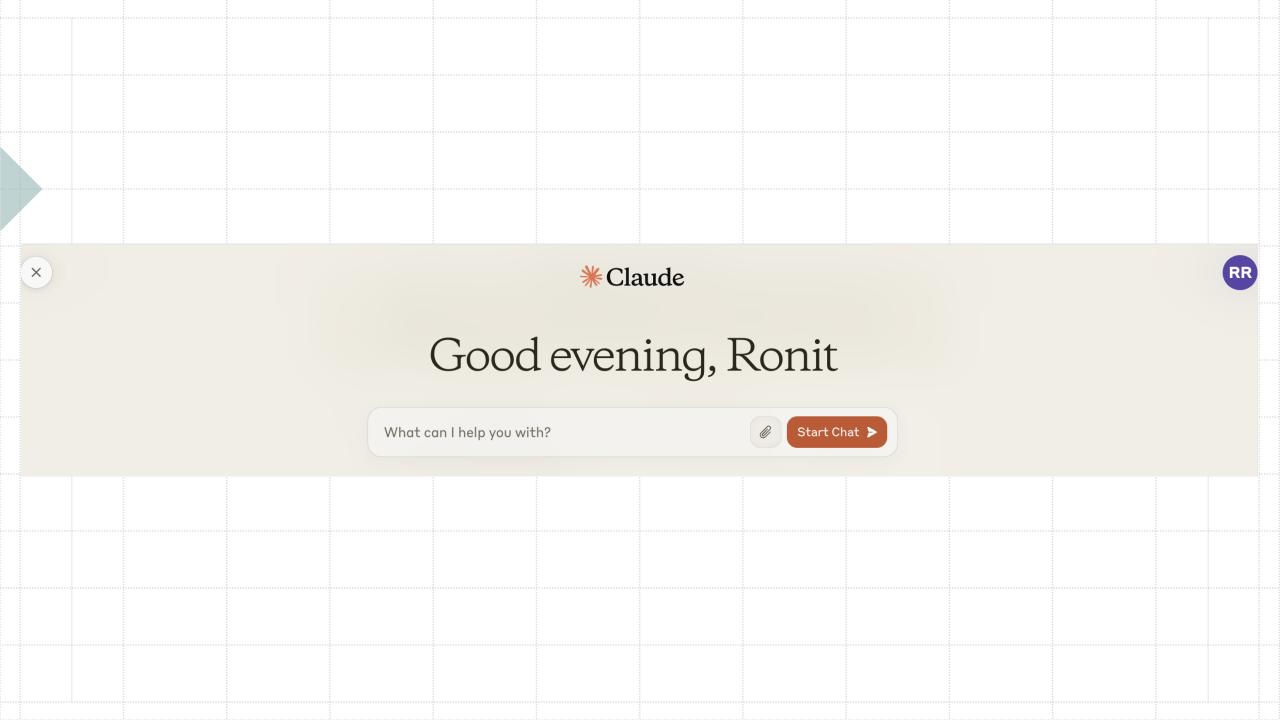
by ANTHROP\C

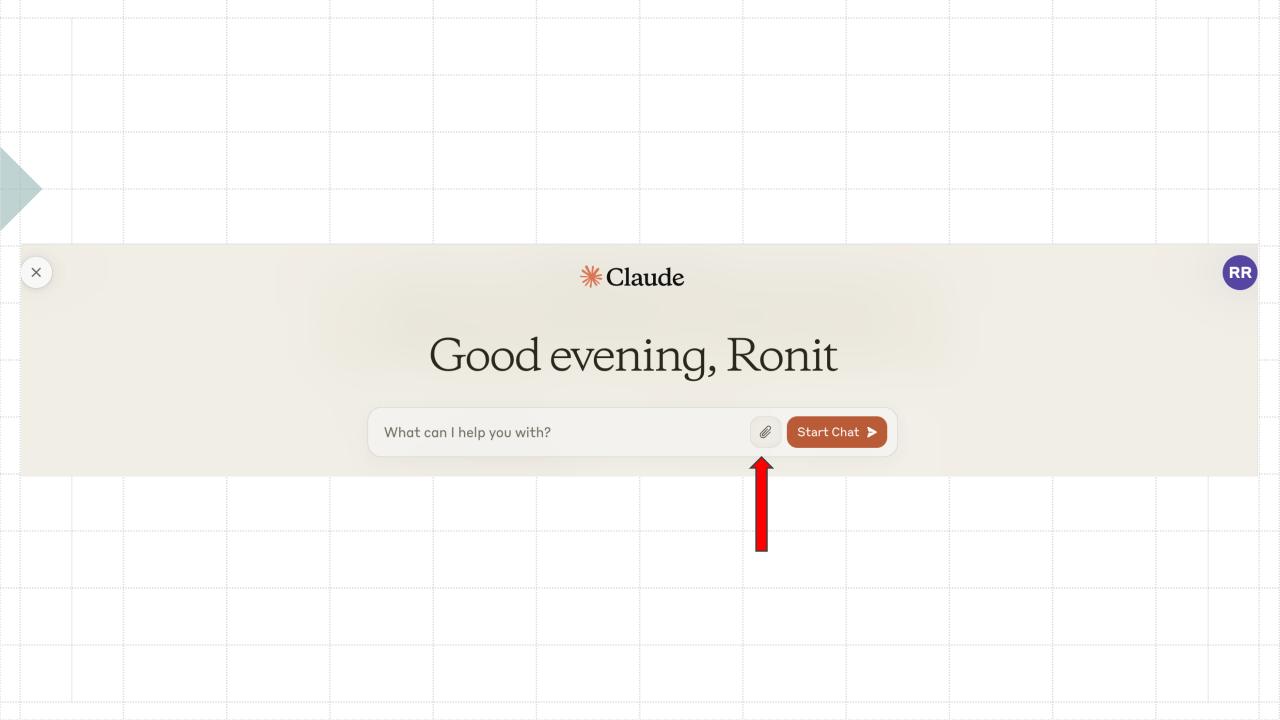
shift + ← to add a new line, %K to create a new chat

Message Claude...







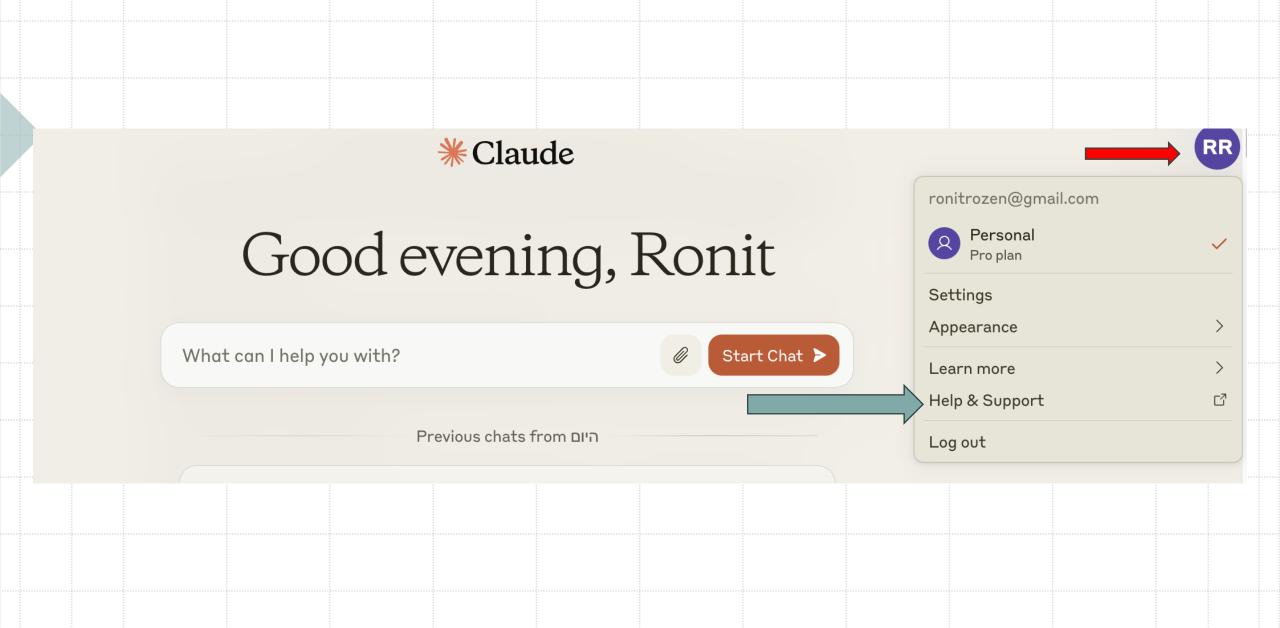




## vening, Ronit

Upload docs or images to Claude (Max 5, 10mb each)



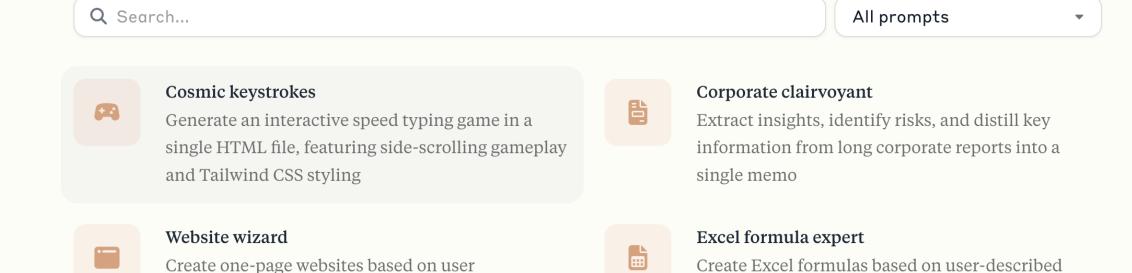


specifications

### **Prompt Library**

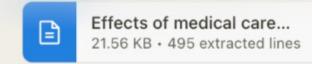
Explore optimized prompts for a breadth of business and personal tasks.

User-submitted prompts have dark backgrounds with light colored icons (currently, there are none). You can submit prompts via our prompt submission form.



calculations or data manipulations

### The Hidden Dangers of Reducing Medical Care for the Elderly >



read the attached and focus in the article you will write on the negative effects of reducing medical care facilities on eldery people in general. add the relevant citations. write it in an assertive and very convincing way in order to convince that reduced medical services are dangerous to old people

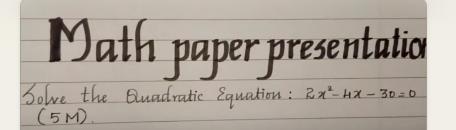
RR

Here is a draft article focusing on the negative effects of reducing medical care access for elderly people:

Reducing Medical Care for Elders: A Dangerous Path

Limiting medical care availability severely impacts elderly individuals, who often require more frequent health services and monitoring to manage chronic conditions and age-related declines. Reduced transportation options that restrict access to necessary treatments compromise elders' ability to navigate their care independently, worsening disease progression and reducing quality of life.[1]

Failing to meet older patients' wide-ranging care needs also provokes rapid physical and mental deterioration. One alarming case study found an elderly woman became depressed, incontinent and fully dependent when moved to a restricted care facility during a healthcare system bottleneck. [2] Her precipitous decline highlights the clear



RR Please solve this equation

To solve the quadratic equation  $2x^2 - 4x - 30 = 0$ , we can use the quadratic formula:

$$x = [-b \pm v(b^2 - 4ac)] / 2a$$

where 
$$a = 2$$
,  $b = -4$ , and  $c = -30$ .

Plugging in these values:

$$x = [4 \pm \sqrt{(-4)^2 - 4(2)(-30)}] / (2^2)$$

$$= [4 \pm \sqrt{16 + 240}] / 4$$

$$= (4 \pm \sqrt{256}) / 4$$

$$= (4 \pm 16) / 4$$

This gives us two solutions:

$$x1 = (4 + 16) / 4 = 20 / 4 = 5$$

$$x2 = (4 - 16) / 4 = -12 / 4 = -3$$

Therefore, the solutions to the quadratic equation  $2x^2 - 4x - 30 = 0$  are x = 5 and x = -3.

## I am an English teacher in grade 11 in Brazil. How can I use you, Claude, for teaching?

Grammar and vocabulary exercises

**Reading comprehension**: I can offer passages for reading comprehension exercises and generate questions to test your students' understanding of the text.

**Lesson planning**: I can assist you in creating lesson plans, suggesting activities, and finding relevant resources to make your classes more engaging and effective

**Answering questions**: Encourage your students to ask me questions about the English language, grammar, vocabulary, or any other related topics. I can provide clear and concise answers to help them better understand the language

**Role-playing**: Use me to set up role-playing scenarios for your students to practice their conversational skills

**Vocabulary games**: Create vocabulary games with my help, such as word puzzles, crosswords, or word association games

News article discussion: Share a recent English news article with me and ask for a **summary or discussion questions** 

Poetry analysis: Have your students write poetry in English and ask me to analyze the poems, providing feedback on structure, rhythm, and figurative language.

**Error correction**: I can help you identify and correct common mistakes in your students' writing or speaking, **providing explanations for the corrections**.

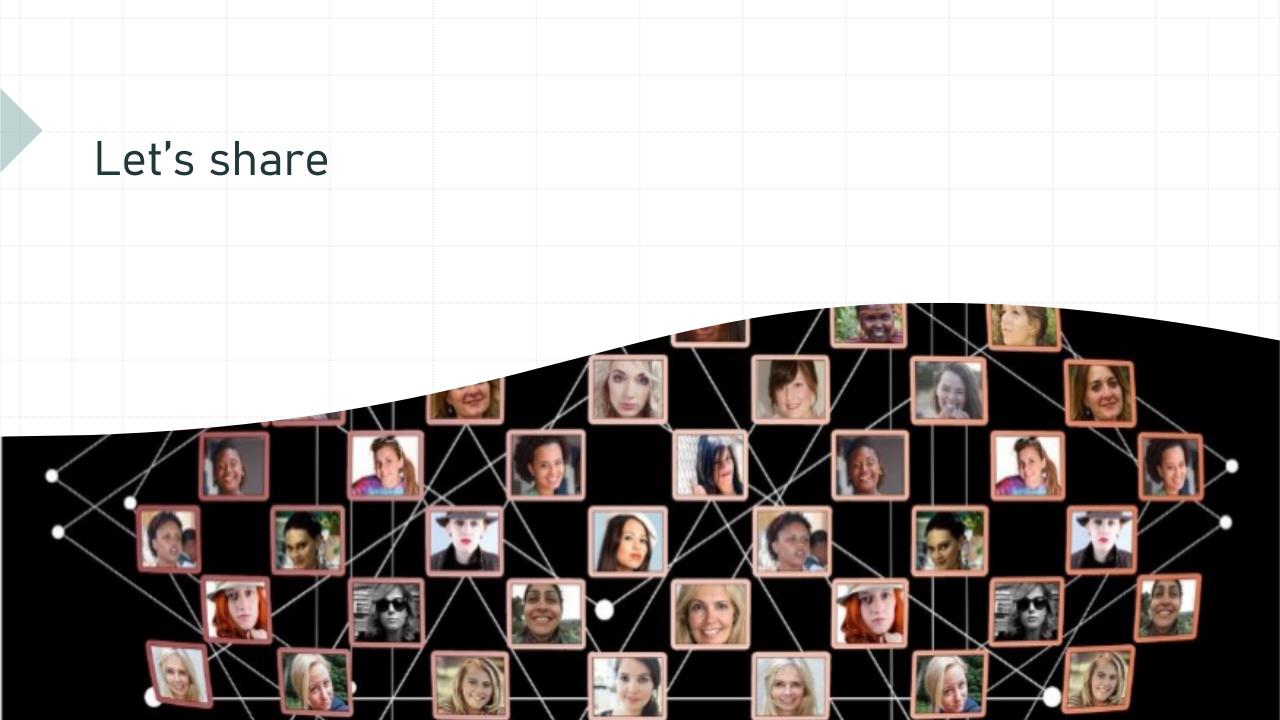
Story collaboration: Start a story and have your students take turns adding to it by interacting with me. This encourages creative **writing and collaboration skills** 

Remember that while I can be a valuable tool in your classroom, it's essential to use me as a supplement to your teaching methods rather than a replacement for your expertise and guidance.

# Back to pair practice in breakout rooms

- Agree on a subject of a lesson you want to teach
- Write a prompt for a lesson plan, individually
- Compare your prompts, generate a better one and ask Claude to optimize it
- Ask for a suggestion of PPT for the lesson plan
- What did you learn about using Claude for teaching?





Gemini was just updated. See update

## Hello, Ronit How can I help you today?

Walk me through how to apply for a new role

Create vibrant & playful image with lots of details

Briefly summarize this concept: urban planning

Help me compare these college majors





Ō

Humans review some saved chats to improve Google AI. To stop this for future chats, turn off Gemini Apps Activity. If this setting is on, don't enter info you wouldn't want reviewed or used. How it works

Enter a prompt here







i would like you to generate a song about the usefulness of ai for teaching according to the music of the wall song

Show drafts 💙



#### (Verse 1)

The classroom drone, a monotonous scene Facts and figures, a learning machine

Teacher drones on, a voice in the fog

But a new mind's spark, breaks through the smog

#### (Chorus)

AI, AI, not a brick in the wall

A bridge to knowledge, to enthrall

Personalized paths, a flame to ignite

Learning's a journey, burning ever so bright

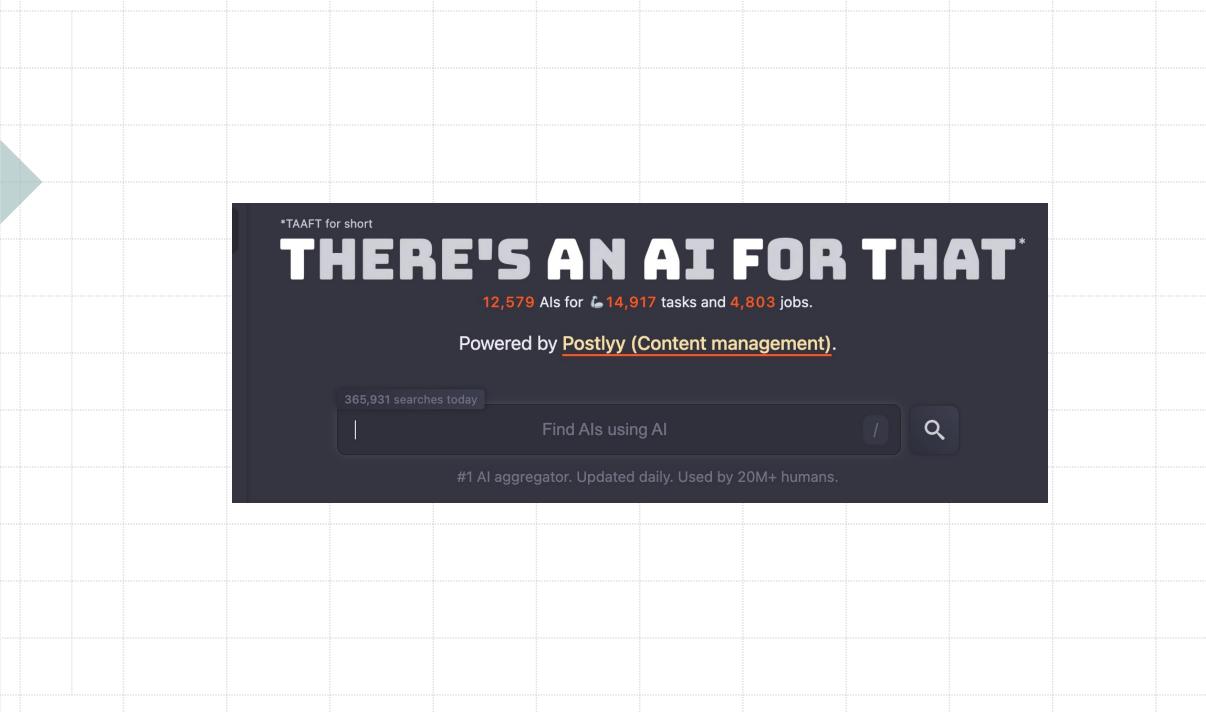
#### (Verse 2)

Struggling with math, a concept unclear

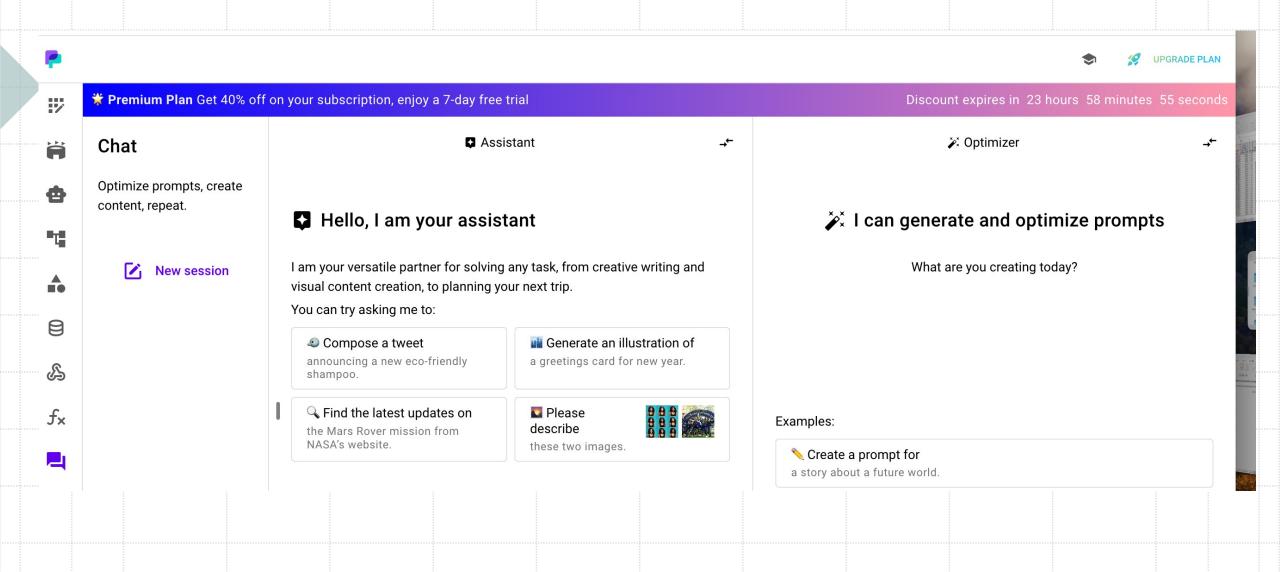
Al steps in, whispers right in your ear

## THE WALL STREET JOURNAL.

OVERALL	Perplexity	© ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑	Gemini	∵` ≡   Claude	Copilot
HEALTH	ChatGPT	Gemini	Perplexity	Claude	Copilot
FINANCE	Gemini	Claude	Perplexity	-()- ChatGPT	Copilot
COOKING	-(Ĉ-)- ChatGPT	Gemini	Perplexity	Claude	Copilot
WORK WRITING	Claude	Perplexity	Gemini	-()- ChatGPT	Copilot
CREATIVE WRITING	Copilot	Claude	Perplexity	Gemini	-(ChatGPT
SUMMARIZATION	Perplexity	Copilot	-()- ChatGPT	Claude	Gemini
CURRENT EVENTS	Perplexity	-()- ChatGPT	Copilot	Claude	Gemini



## https://promptperfect.jina.ai/interactive



## Ethical Issues

Privacy and Data Protection - protecting students' personal data

Bias and Fairness - Al systems can perpetuate or amplify biases present in the data they are trained on

**Transparency** – be the student's model

Creating an Ethical AI Policy - guidelines on creating an ethical AI policy

You will not be able to avoid students to use Al.

You can develop their critical thinking!

