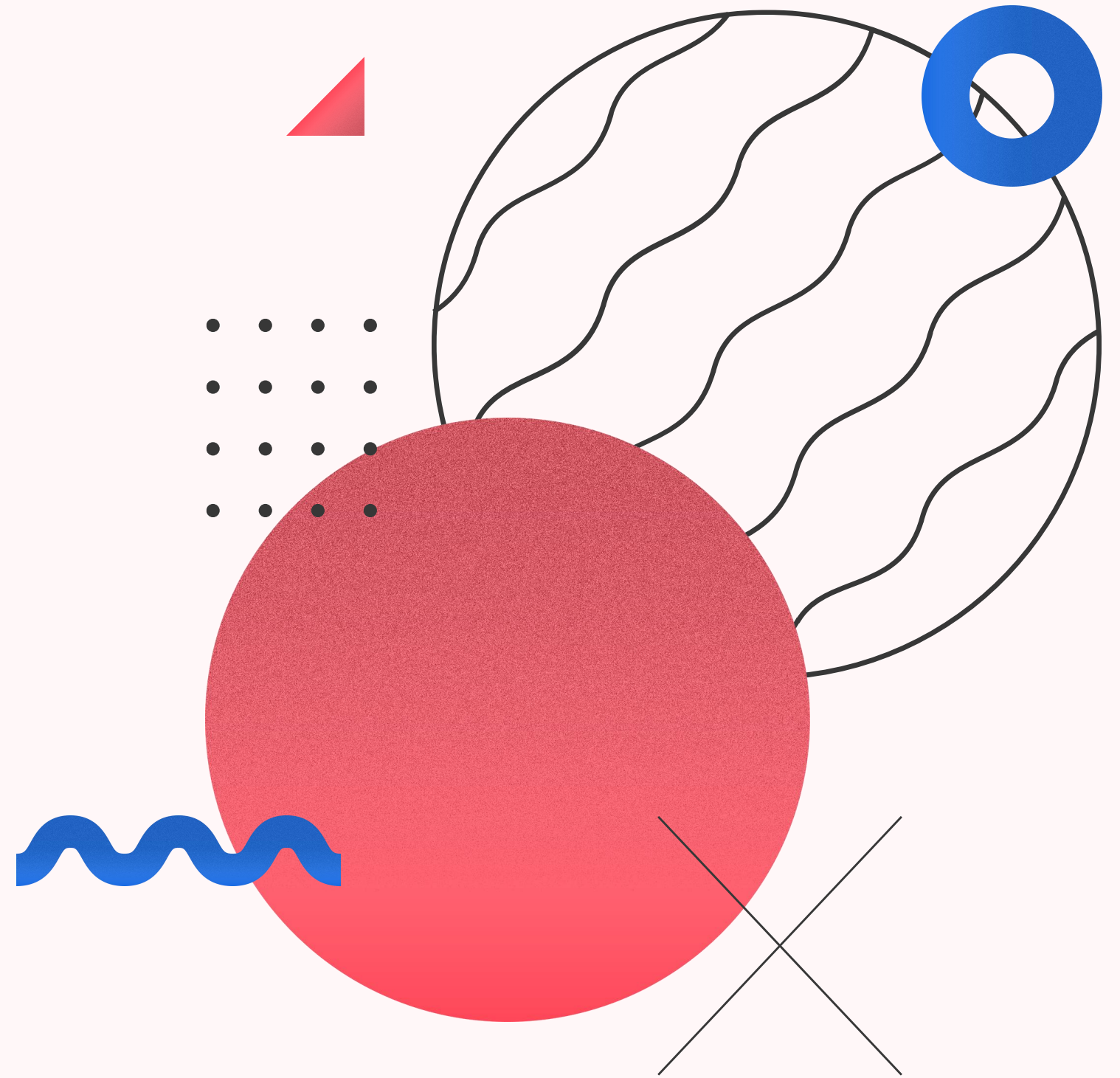
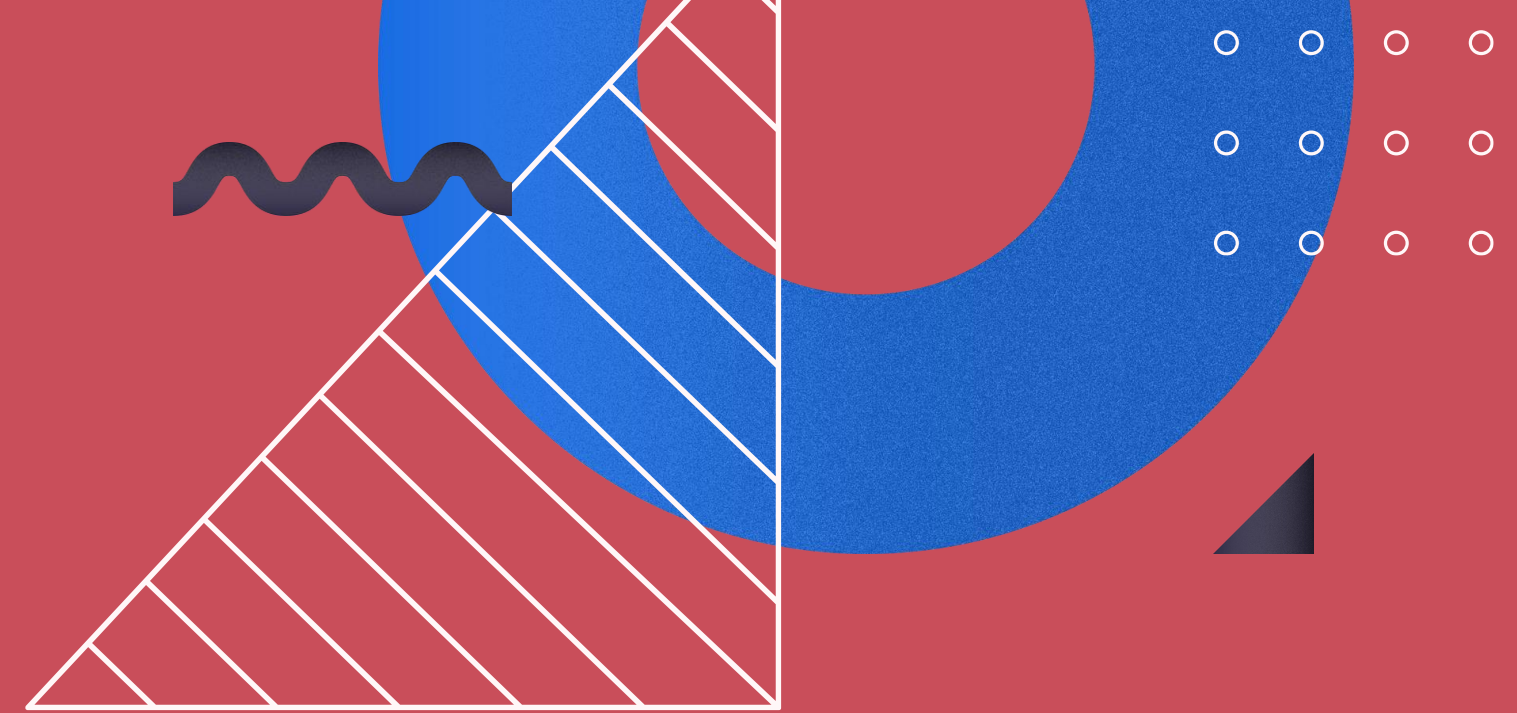


Thinking critically about AI tools

for academic and professional contexts



Agenda



intro to generative AI

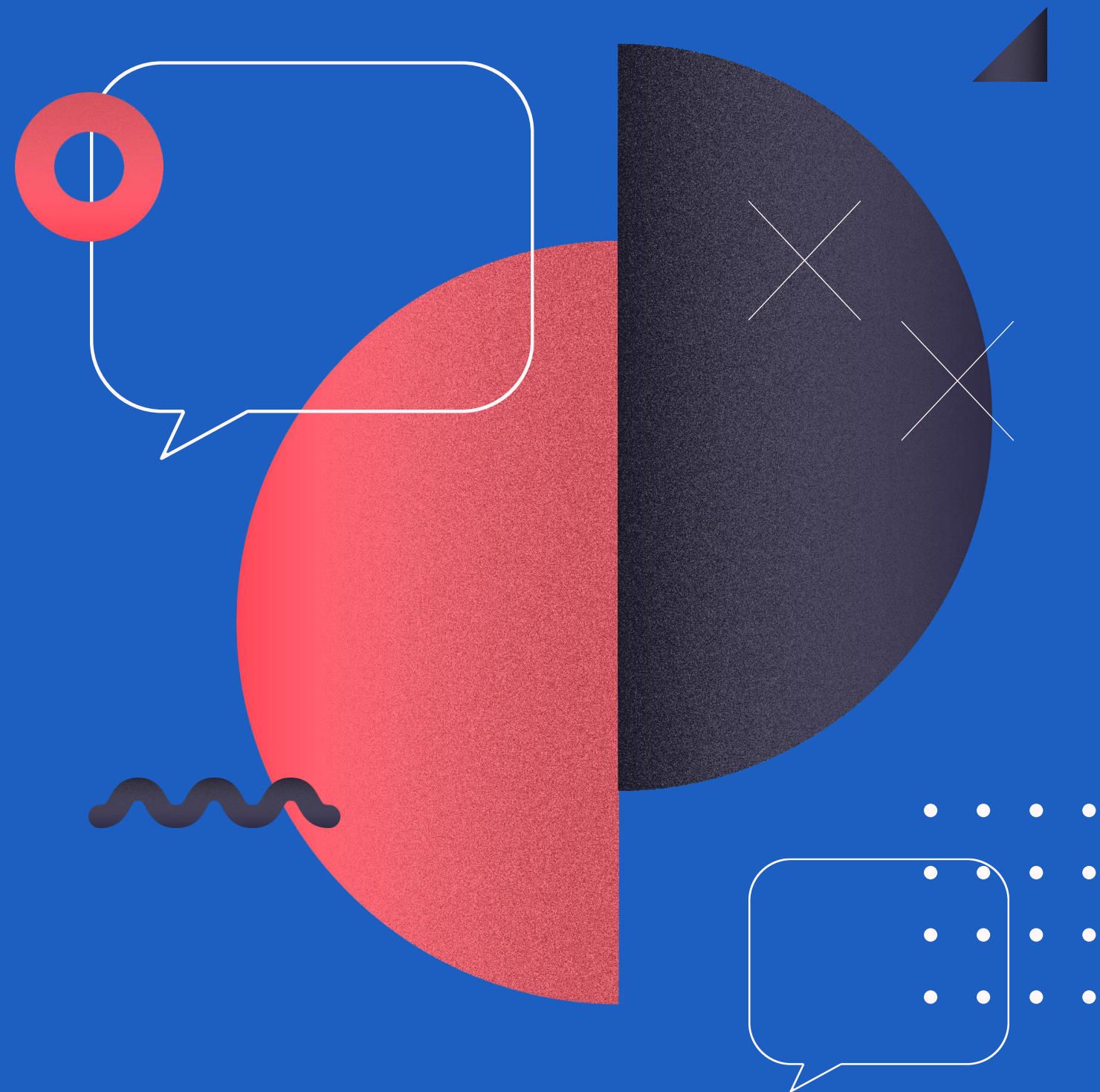
activity: experiment with
ChatGPT

pros and cons of gen AI

activity: evaluating AI

academic AI tools

questions

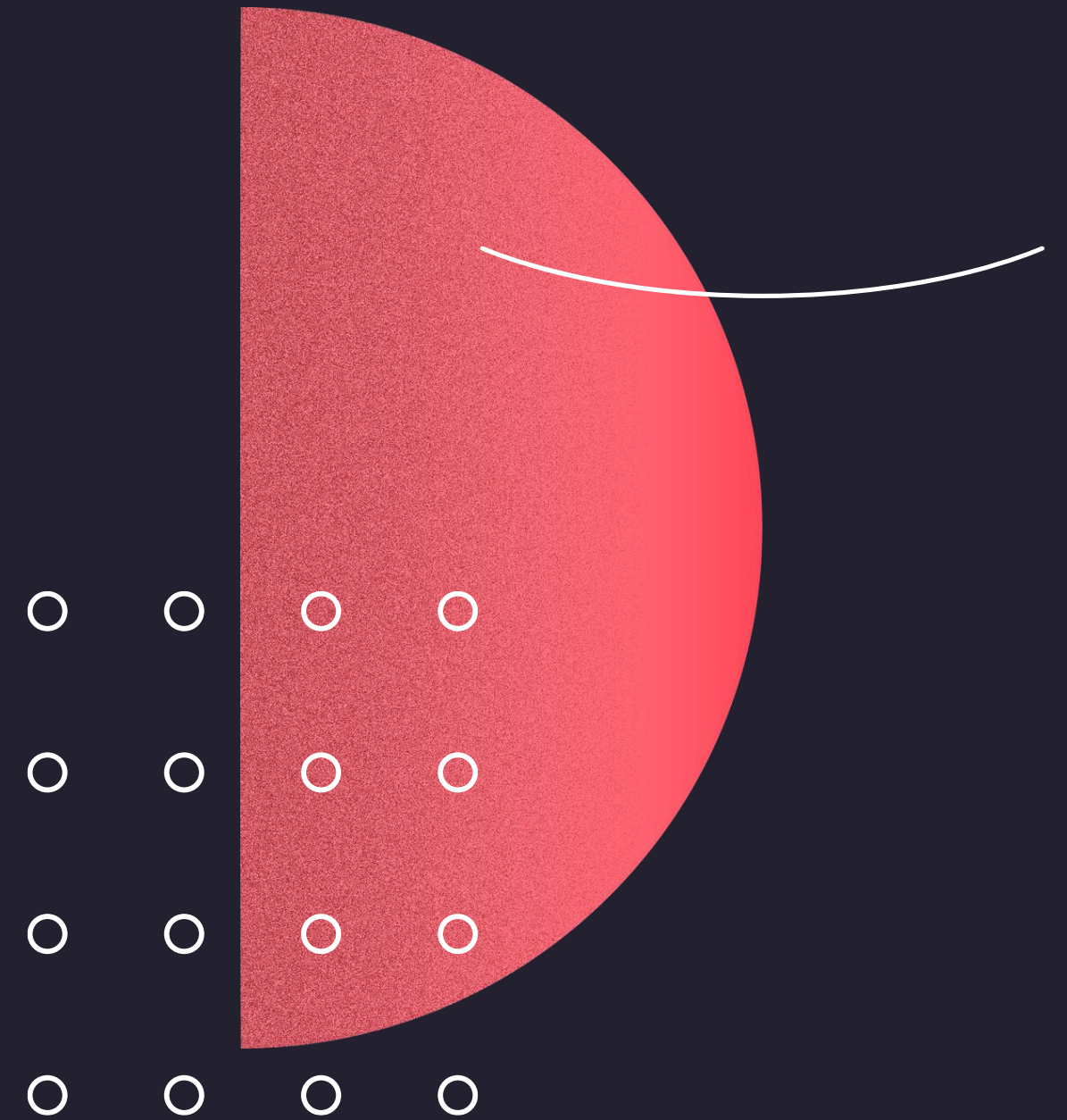


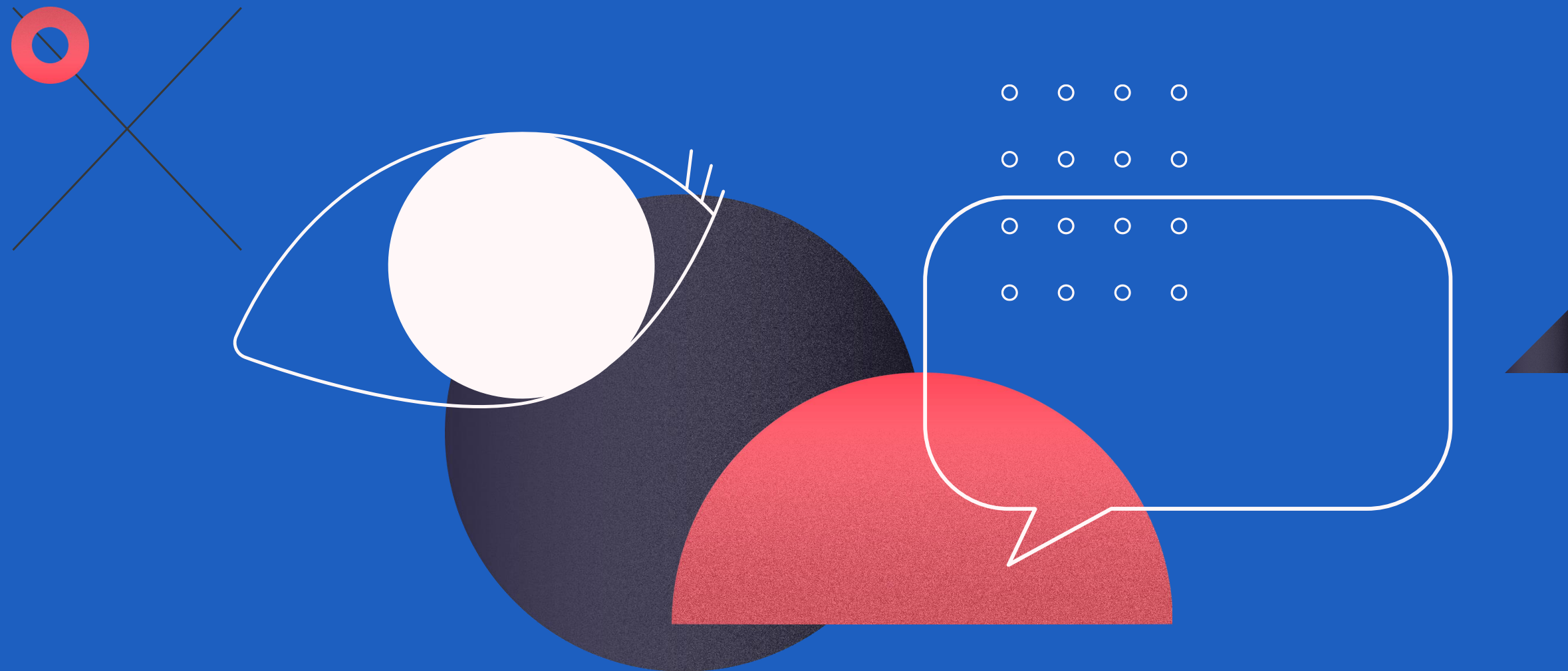
**What do you think
of when you hear
"artificial
intelligence"?**

What is artificial intelligence?

"a system's ability to interpret external data correctly, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation"

Haenlein & Kaplan 2019





How does generative AI work?

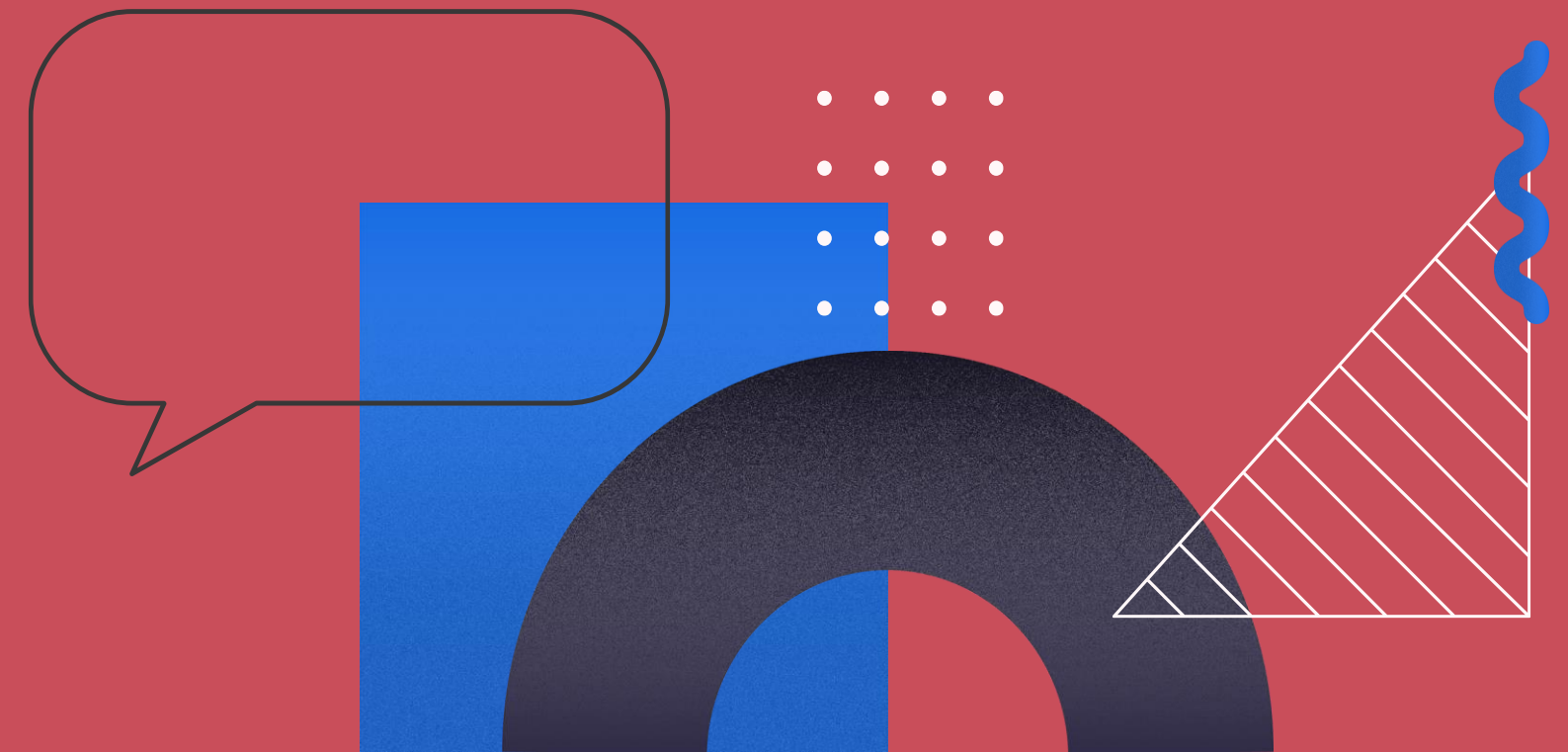
machine learning system

generates content based on
training data

prompt for content creation
input by user

Try it out!

Experiment with different prompts



1. Open a generative AI chat bot:

- if you already have a ChatGPT account: <https://chat.openai.com/>
- if you don't have an account: <https://www.perplexity.ai/>

2. Create a prompt based on something you have been working on for class or for your job, or something you are personally interested in

3. Try changing your prompt to see how it changes the output!

Different types of tools

Search engines (ex. Google)

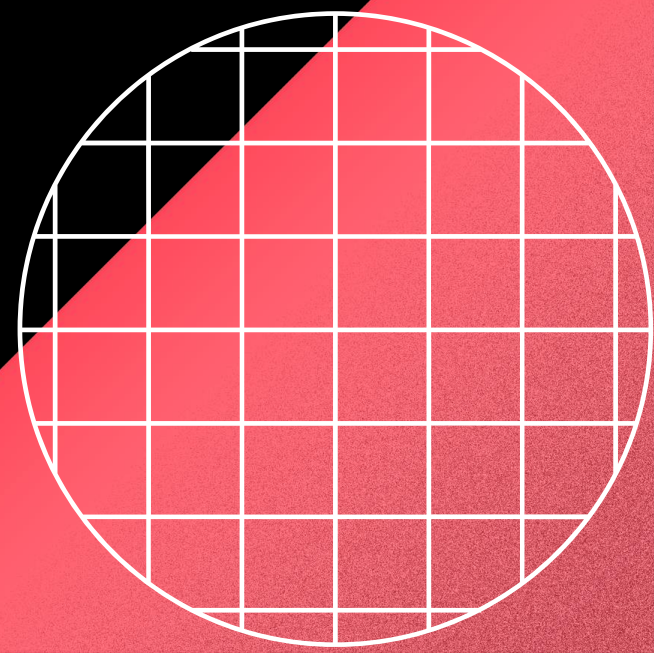
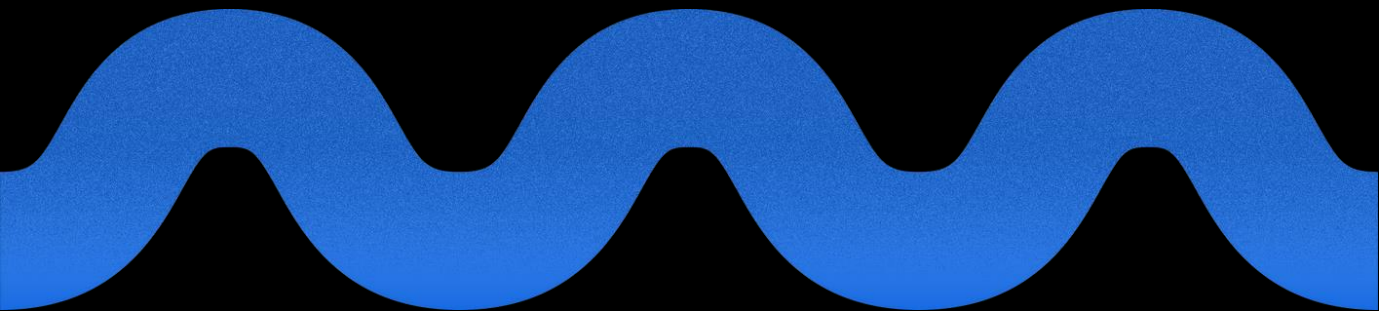
Retrieve pages on the web that match the keywords searched for

Generative AI (ex. ChatGPT)

Generate new text in response to the prompt based on **words** “learned” through training

GenAI in search (ex. Perplexity)

Search the web and generate new text based on both the results and the AI’s training



CLEAR prompt engineering

Lo, 2023; Open AI, n.d.

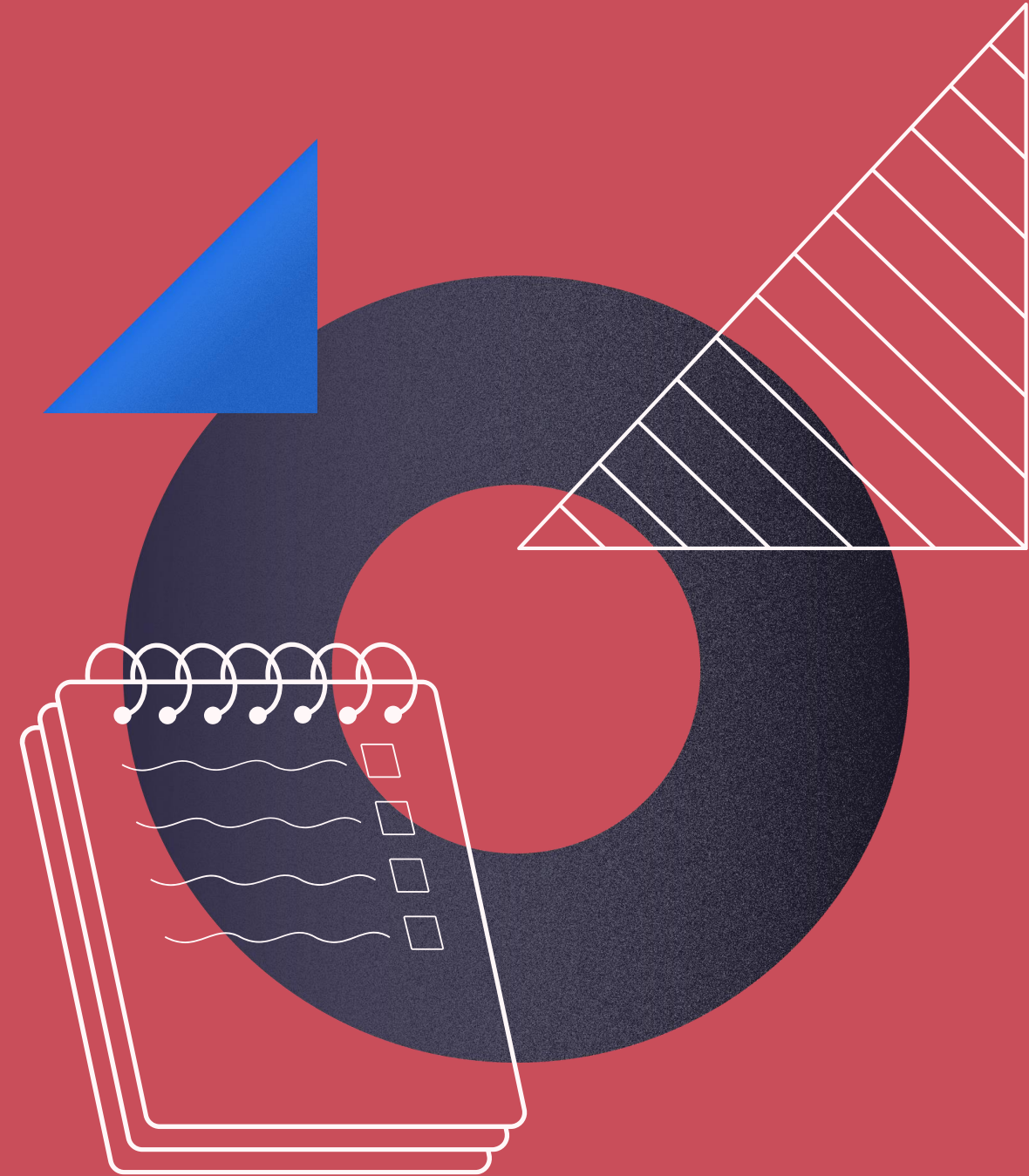
CONCISE

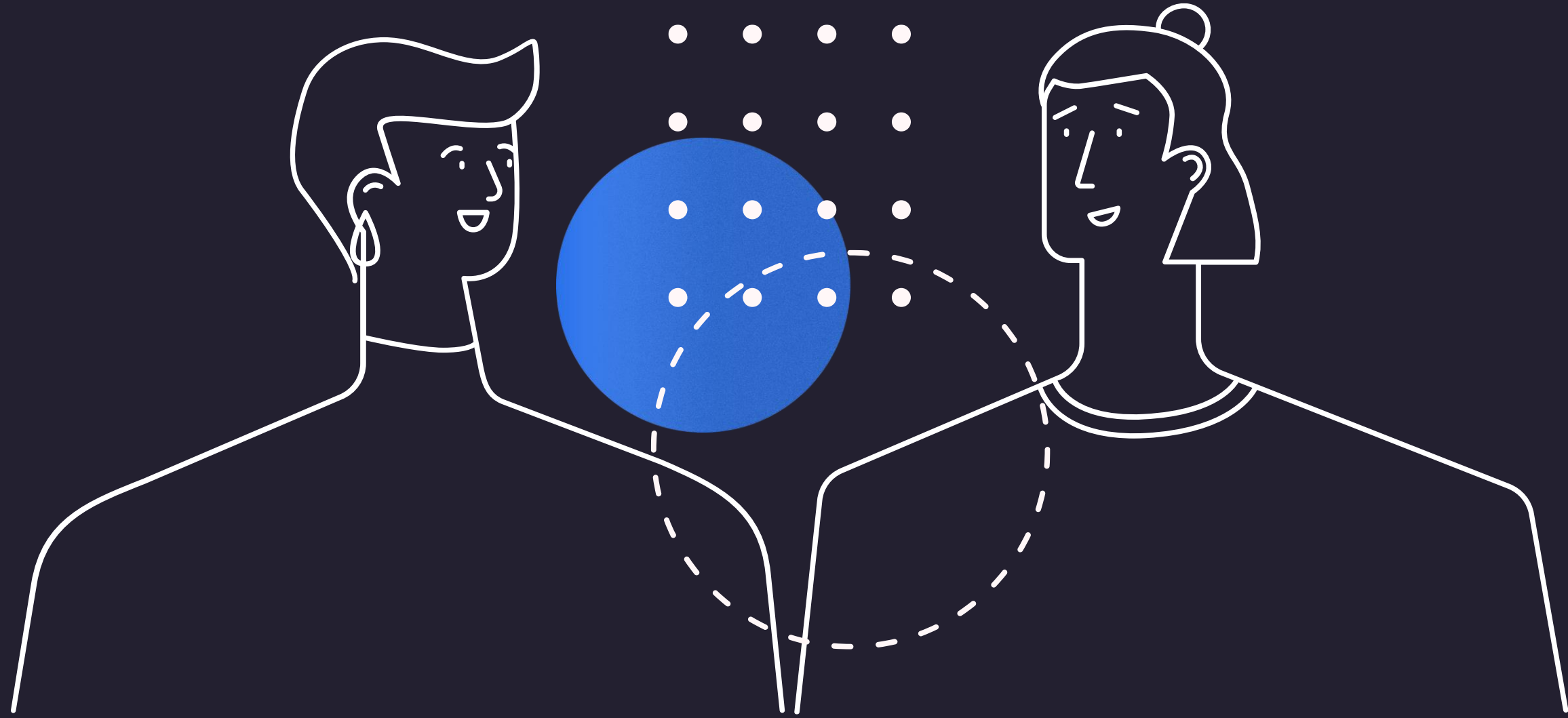
LOGICAL

EXPLICIT

ADAPTIVE

REFLECTIVE





Checking in

what worked well? what didn't?

Pros and cons of generative AI

Farrokhnia et al., 2023

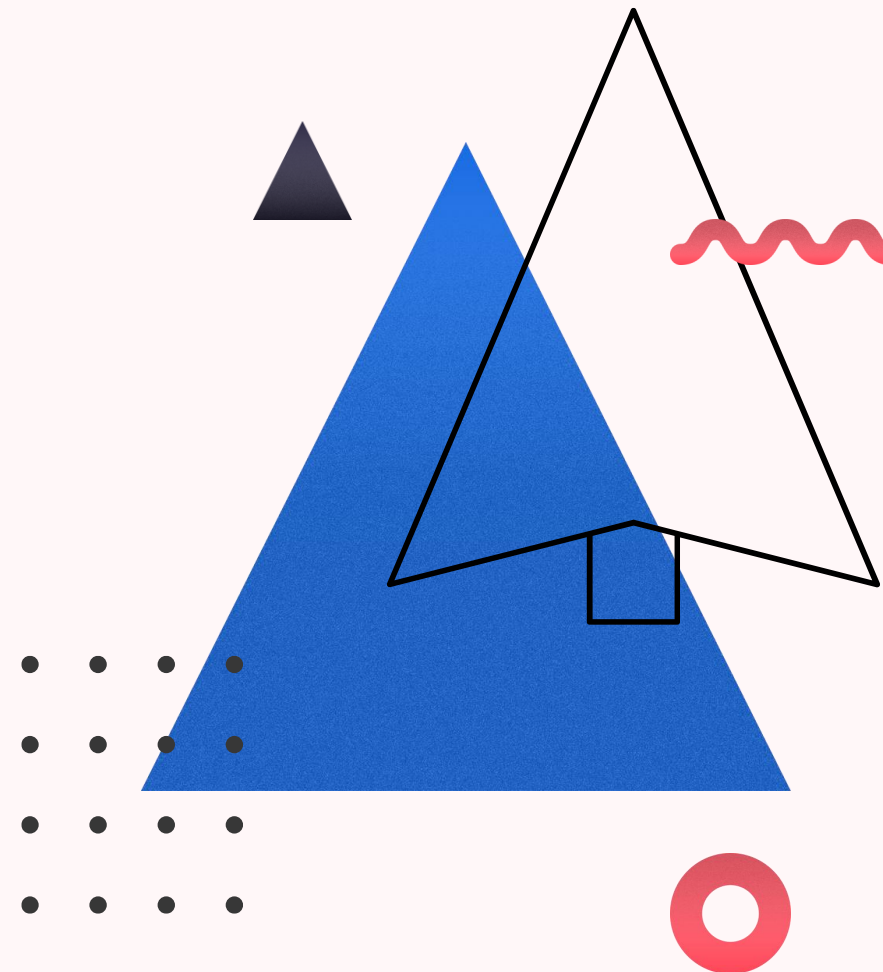
Wach et al., 2023

PROS

- quick results
- personalized and responsive
- persuasive or polished output
- ease of access to information
- automation of basic tasks
- processing/analyzing lots of data

CONS

- biased training data
- lack of industry regulation
- lack of developer transparency
- inaccuracy & disinformation
- privacy & copyright concerns
- labour issues
- environmental impact
- decline of human skill (?)



Suggested uses

Use ChatGPT (or similar tools) for:

getting feedback on writing

brainstorming topics for projects

summarizing complex ideas or topics (make sure you fact check!)

simulating job interview questions

debugging or explaining code

translating for your own understanding

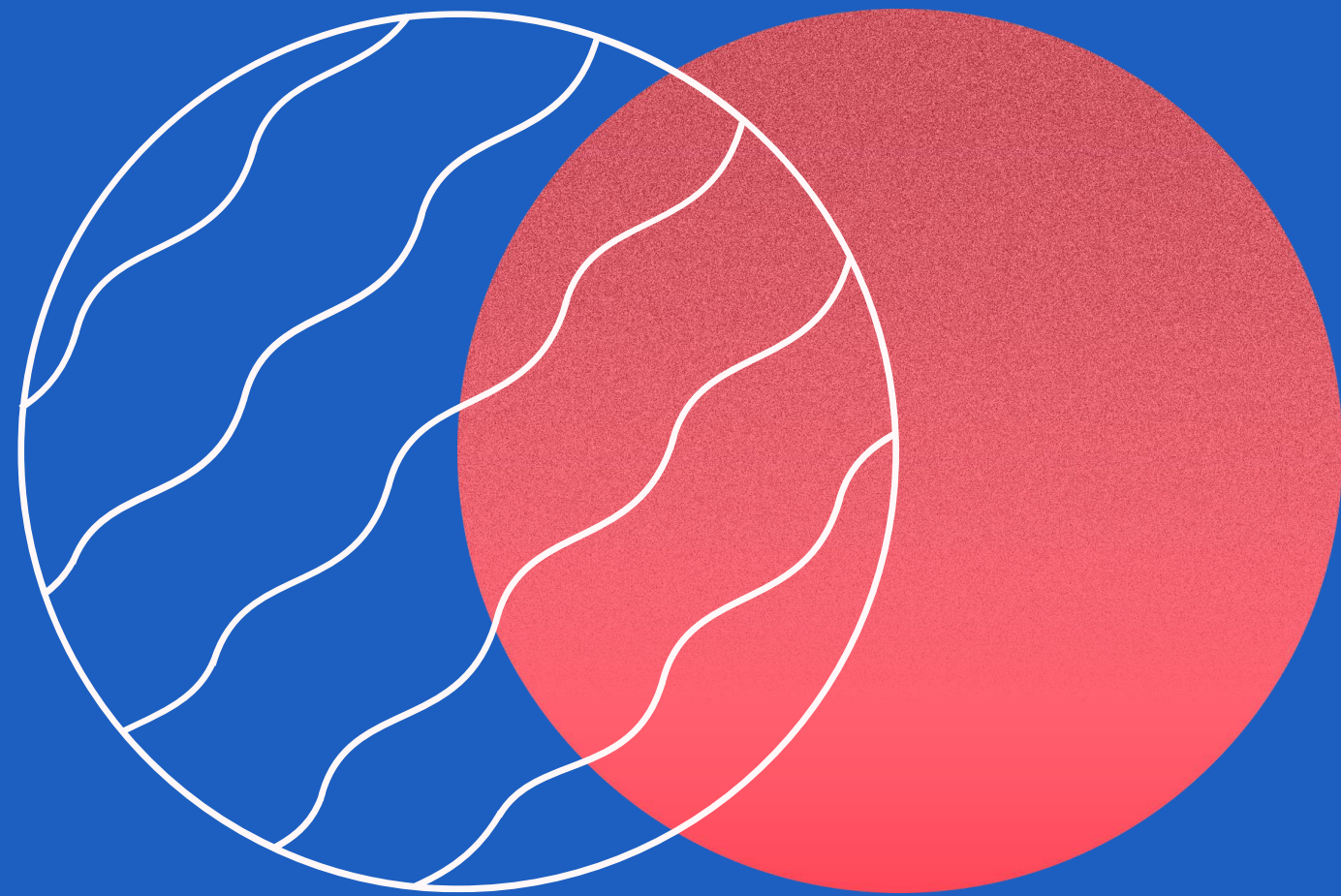
Avoid using ChatGPT (or similar tools) for:

verifying facts

finding articles

giving feedback on arguments, logic, or evidence

writing creative, critical or analytic content



5 principles for ethical AI

Floridi & Cowls, 2019

BENEFICENCE

NON-MALEFICENCE

AUTONOMY

JUSTICE

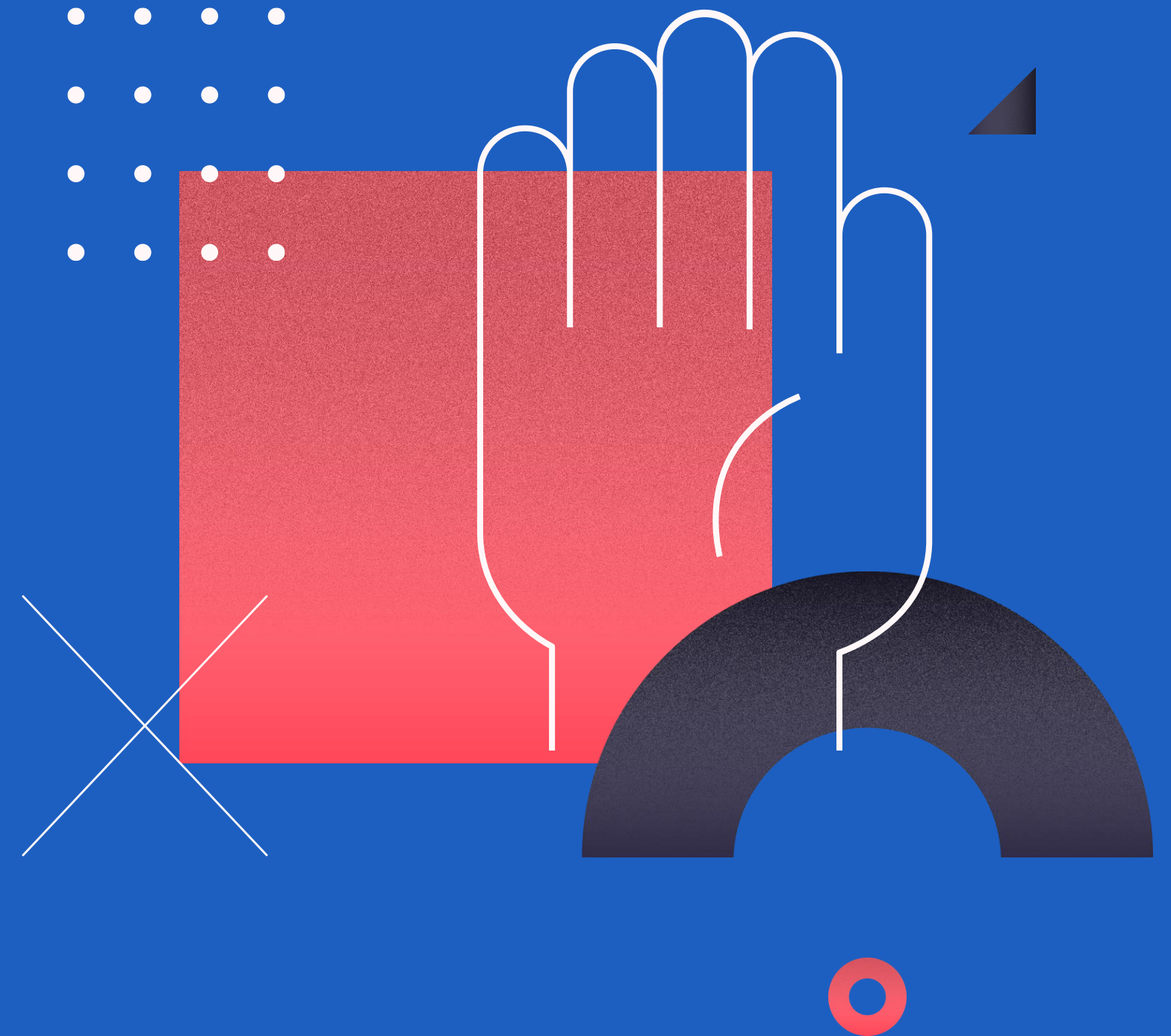
EXPLICABILITY

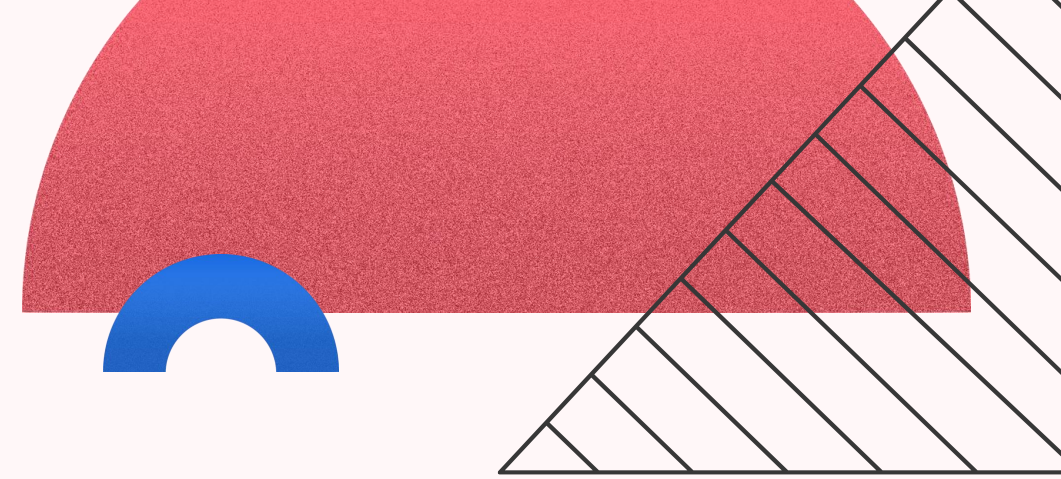
Evaluating AI

Based on your experience so far with ChatGPT:

1. What is the content quality of the tool's output?
2. Do you notice any bias or ethical issues?
3. Does the AI tool encourage ethical or unethical use?

Reflect on your own for 5 minutes,
then discuss your thoughts in groups of 2-3 for another 5 minutes





[Elicit](#) - finds and summarizes articles

[Research Rabbit](#) & [Inciteful](#) - graph citations and find new articles

[Consensus](#) - search engine that uses real research to answer questions

Academic AI search tools





**How do you
imagine using AI
tools in the
future?**

Upcoming AI events

AI and academic writing

Thursday, March 7

10:00 a.m. – 12:00 p.m.

H-769

Register through the Student Success Centre





Learn more

**Quick Things for Digital Knowledge
page on ChatGPT & generative AI**

library.concordia.ca/apps/things



Questions?

Thanks for participating!



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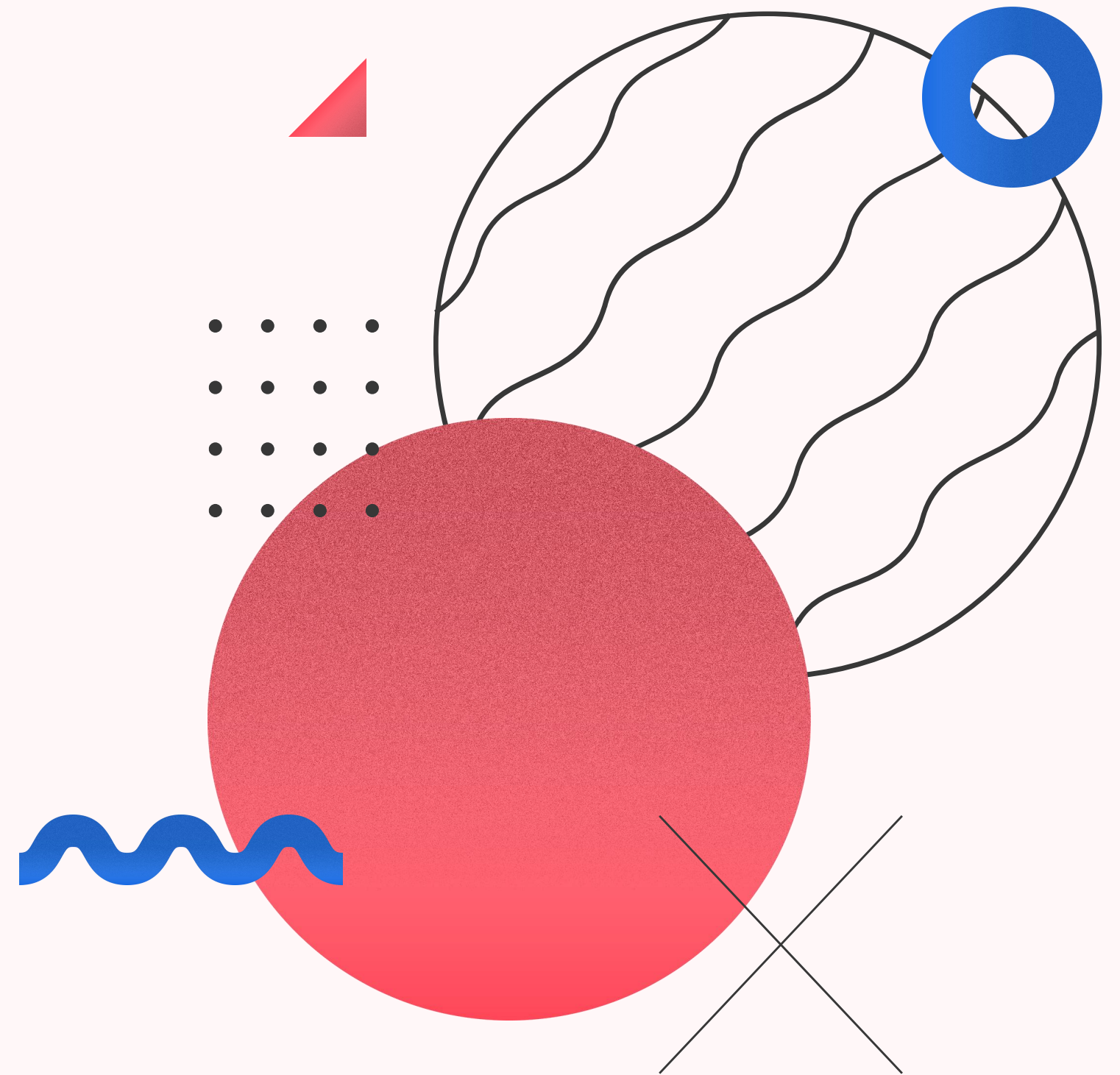
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bit.ly/culibfeedback



Thank you for your feedback!