

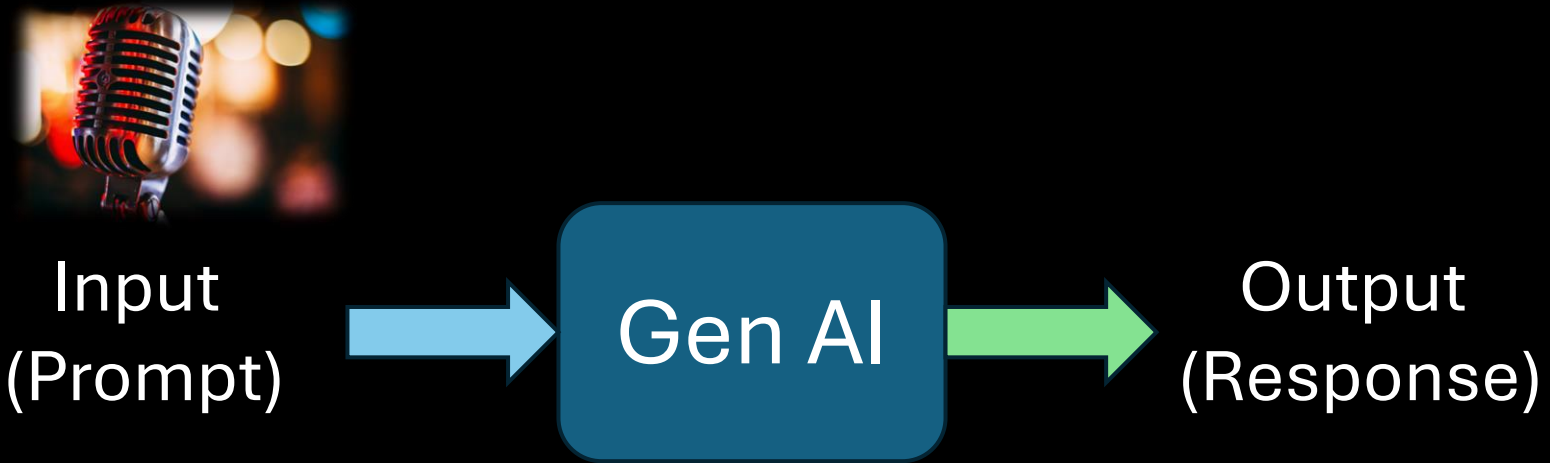
The background of the slide is a photograph of Antelope Canyon, showing its characteristic smooth, undulating sandstone walls in shades of orange, red, and purple. The lighting creates a dramatic, ethereal atmosphere with strong shadows and highlights.

Key Challenges and Limitations

Generative AI for Absolute Beginners

By Idan Gabrieli



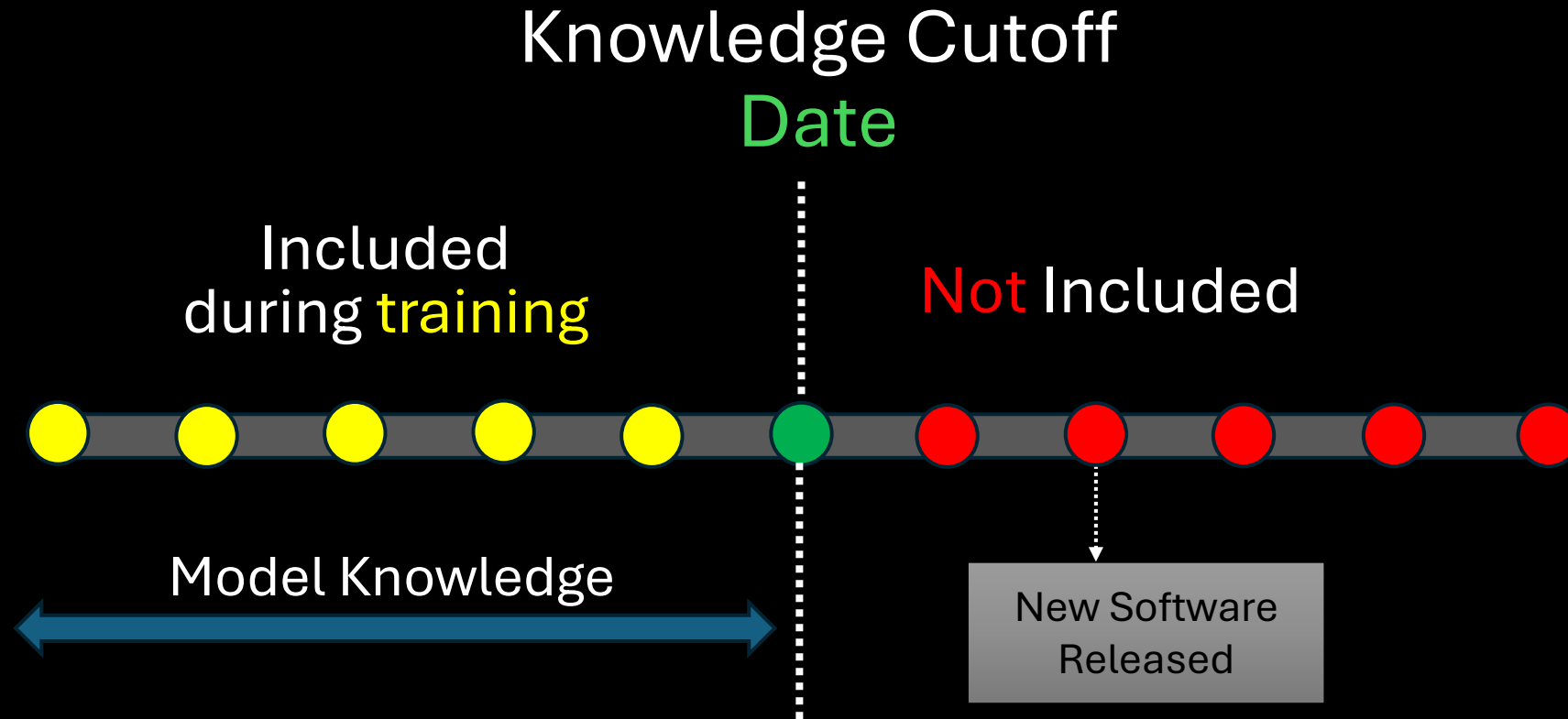


“Garbage **in**, Garbage **Out**...”

Prompt Engineering

Crafting and optimizing prompts

Guiding a model to required response



Knowledge Cutoff

- #1 - Re-train a model in **repeated** intervals
- #2 - connect the model with **online tools**

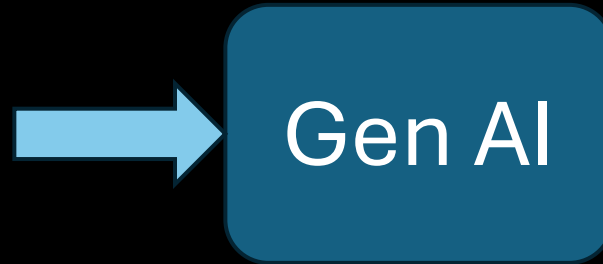
Simulate
“human thinking”

Same Input
(Prompt)



Different Outputs
(Responses)

“What are the best ten
ice cream flavors?”



Output #1

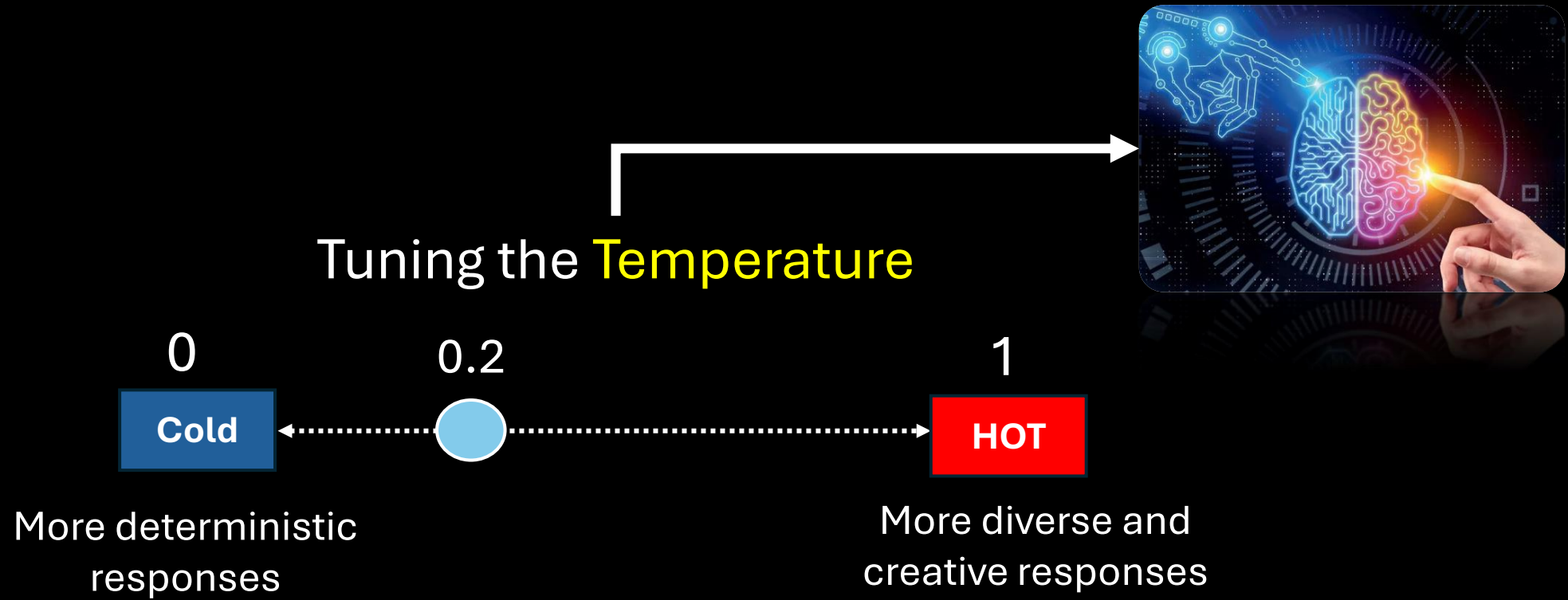
Vanilla
Chocolate
Mint Chocolate Chip
Cookies and Cream
Salted Caramel
Strawberry
....

Output #2

Vanilla
Chocolate
Mint Chocolate Chip
Cookies and Cream
Strawberry
Salted Caramel
....

Probability of popular flavors

- Vanilla = 95%
- Chocolate = 80%
- Mint Chocolate Chip = 62%
- Cookies and Cream = 57%
- Salted Caramel = 44%
- Strawberry = 41%
-



Product Reviews ★★★★★

Product Name	Category	Date	Age	Gender	Location	Score
Product A						***
Product B						*****
.....					

Tabular Data

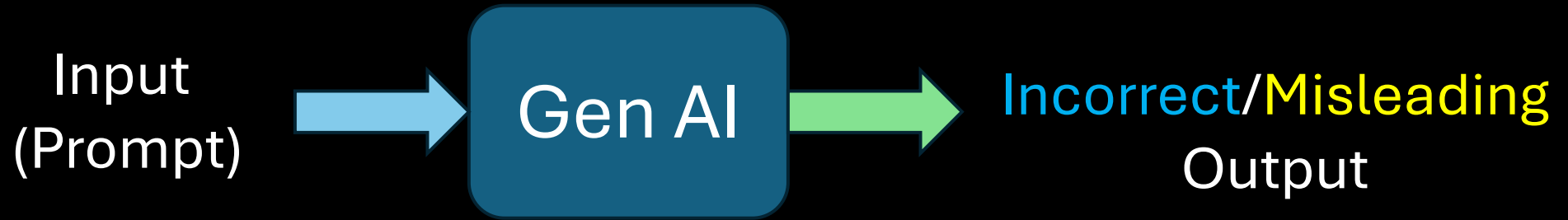
Gen AI

???

Trained based on **unstructured** data (text)Limited **context window**



Hallucinations

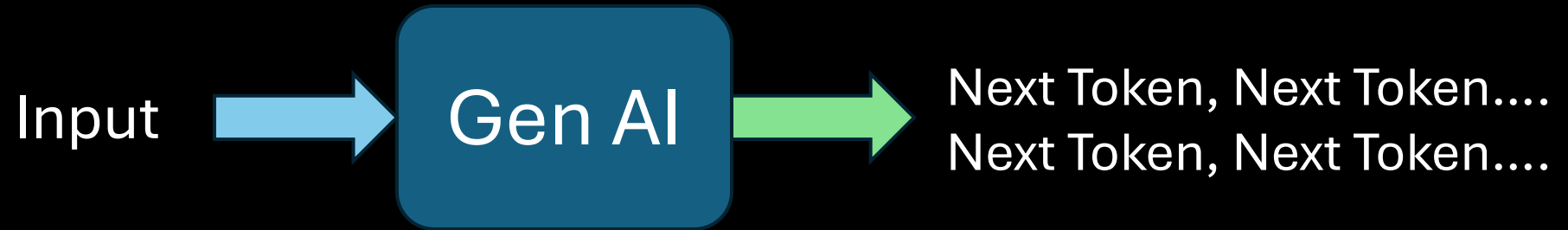


Insufficient training data

Data quality

Lack of up-to-date data

More...



Sophisticated **pattern recognition** system

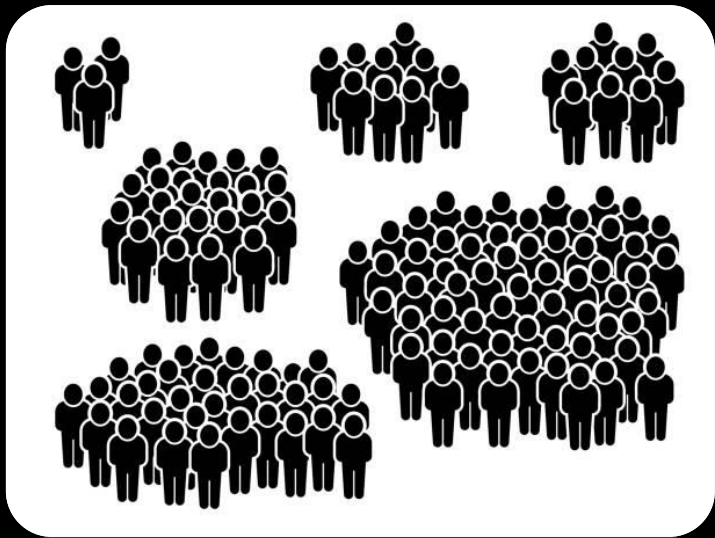
Lack the **common sense** of the average person

Statistical patterns/associations

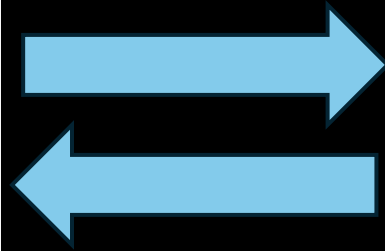
Adding **common sense** to machines is **HARD...**



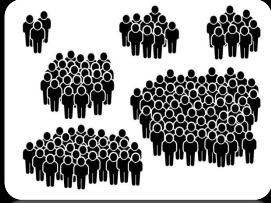
Unique **Perspectives**



Some groups with an **agenda**

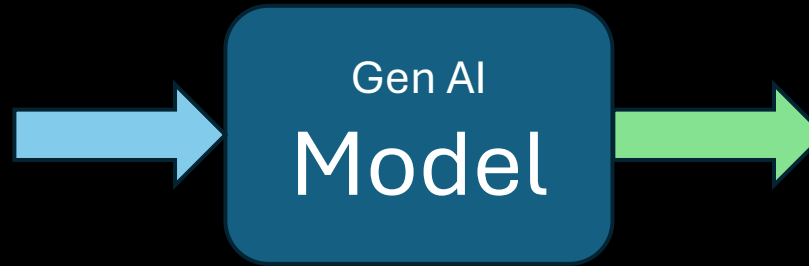


Many peoples → Many different opinions → Many subjects



Billions of public
data sources

Training Phase



Unfair
Unethical
Misleading

The model knowledge will include
a variety of biases on different topics

There is a constant efforts to minimize biases

Data

Privacy, Security and Misuse

