

Purpose in the Age of AI

Day 3

Nick Zufelt

Life on a Star 2025



Slides!



Generative AI



Copilot



ChatGPT



sora



Claude



Gemini



Midjourney



Stable Diffusion

foraging in its native _____



land	22%
forest	9%
country	5%
habitat	4%
forests	4%
soil	4%
territory	2%
woods	2%
lands	1%
waters	1%
woodland	1%
grass	1%
⋮	

Large Language Models

“forests”

Can you use these in a paragraph?

- Context
- Training Corpus
- Distribution
- Sampling

[But what is a GPT? Visual intro to transformers](#)

3Blue1Brown (on YouTube), 2024-04-01

Attention Is All You Need

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I tripped over a rock and landed right in the **spring**.

I don't really like that bed, it has **springs** that are way too stiff.

Spring showed up and so did my allergies.

I **tripped over a rock** and landed right in the **spring**.



A diagram consisting of an orange rectangular box around the words "tripped over a rock". An orange curved arrow starts from the bottom of this box and points to the word "spring" in the sentence.

I don't really like that **bed**, it **has** **springs** that are way too **stiff**.



A diagram with four teal rectangular boxes around the words "bed", "has", "springs", and "stiff". Teal curved arrows connect them: one from "bed" to "has", one from "has" to "springs", and one from "stiff" to "springs".

Spring **showed up** and so did my **allergies**.



A diagram with two orange rectangular boxes around the words "showed up" and "allergies". Orange curved arrows point from both boxes to the word "Spring" at the beginning of the sentence.

In the bustling city square, a violinist played a melody that seemed to weave through the hum of conversations and the clatter of footsteps. The air smelled faintly of roasted chestnuts from a nearby vendor, blending with the crisp scent of early autumn. Children chased each other around the fountain, their laughter mingling with the music. She stood under the shade of an old oak, her thoughts carrying her far away as her notes drew the attention of passersby.

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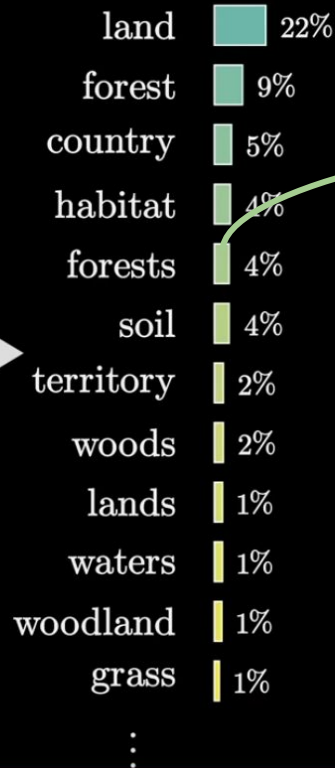
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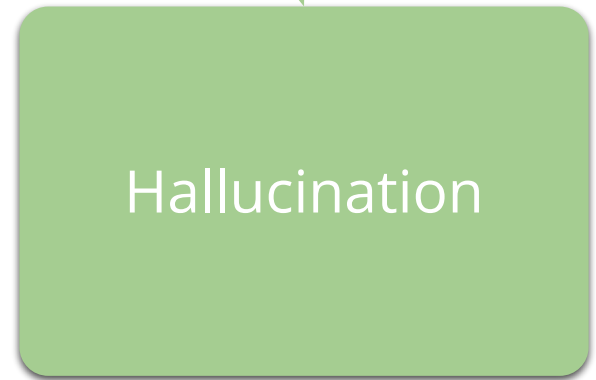
She

her notes

foraging in its native _____



"forests"



[But what is a GPT? Visual intro to transformers](#)

3Blue1Brown (on YouTube), 2024-04-01

AI hallucinates just like
your Uncle Norm “hallucinates”.

(I say this to students.)





- **Diamond** = Compressed pencil lead (carbon), tight.
- **Ruby & Sapphire** = Compressed aluminum foil and oxygen (like in foil and air), with red or blue color (for rubies) or iron and titanium (for sapphires).
- **Emerald** = Compressed sand + metal. It's more of a splash of **chrome** (the metal on shiny car parts).
- **Amethyst** = Purple-tinted glass. It's like regular glass with just a touch of iron that turns it purple.
- **Topaz** = Compressed beach sand with a twist.

🧩 Tactile & Experiential

7. Card Game or Puzzle

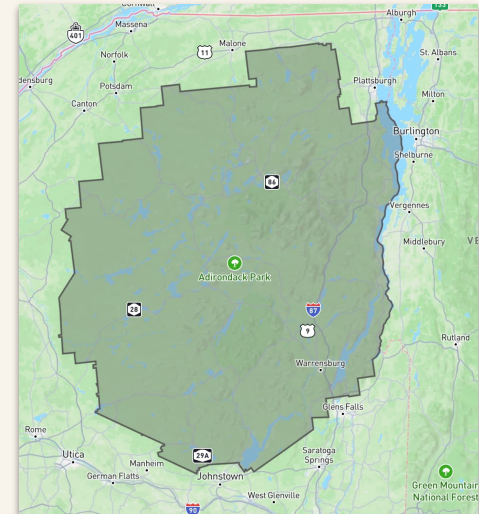
Physical or printable logic puzzle (e.g., substitution/permutation).

8. Board Game Mechanic

Design a rule set for a game.

9. Ziploc Crypto Kit

Create a bag of manipulatives for permutations.





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"Invite AI to the Table."

Ethan Mollick



substitution/permutation).

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