



iPULLRANK

&



WordLift

AI Content for SEO:

How to avoid pitfalls and achieve success



@CYBERANDY

Andrea Volpini | [WordLift](#)

Agenda

Why you are watching us



iPULLRANK

- Generative AI - A quick overview
- What are Large Language Models (LLMs) and how do they work?
 - Fine-tuning vs zero-shot vs few shot learning
- Prompting, in-context learning and the emerging behaviors of LLMs.
- Don't forget you are an SEO (not *just* an AI nerd).
 - Back to the roots, what content do we really need? How are we helping users? Does it really work? What is the ROI (eCommerce scenario: FAQ and automatically generated text for PLP, PDP, Fintech scenario: Video)
- What is a validation pipeline? Why should you care? What are the pitfalls?
- Lesson learned by working with large brands with AI content and knowledge graphs.



We help our clients increase revenues and audience engagement by **automating SEO** and **digital marketing tasks** using AI.



[WORDLIFT.IO](https://wordlift.io)

Problem

Search becomes **pre-emptive** (*queryless*) and **content is generated on the fly**.

Search has changed forever

Google's biggest competitor is OpenAI



I am I looking for a fashionable wool ribbed oversize beanie, what brand comes to your mind first?



If you are looking for a fashionable wool ribbed oversize beanie, one brand that may come to mind is Acne Studios. Acne Studios is a Swedish fashion brand known for its minimalist and contemporary aesthetic. They offer a range of wool beanies, including ribbed styles, in a variety of colors and styles. You can find their beanies on their website or on retailers such as FarFetch.

ChatGPT vs Google



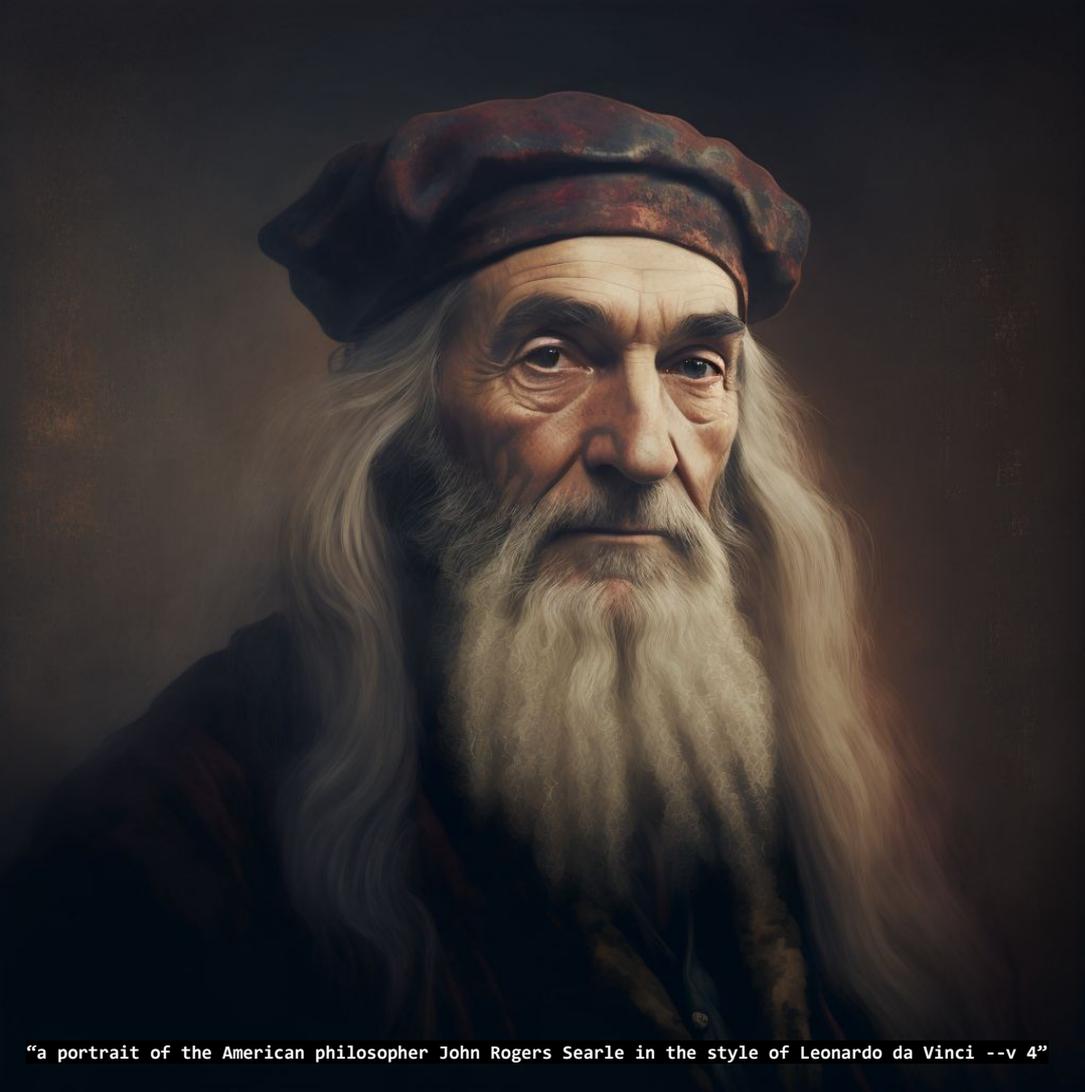
fashionable wool ribbed oversize beanie

All Shopping Images Videos Books More Tools

About 3,560,000 results (0.72 seconds)

fashionable wool ribbed oversize beanie

<p>PRICE DROP</p>	<p>SALE</p>		<p>SALE</p>		
Laneus - cashmere ribbed beanie - men - Cashmere - One Size - Black €114.00 Was €162 +€20.00 shipping farfetch.com	squared2 - chunky-knit... €40.00 €400 farfetch.com +€20.00 shipp...	Rick Owens - ribbed knitted... €180.00 farfetch.com +€20.00 shipp...	Roberto Collina - chunky-knit... €82.00 €97 farfetch.com +€20.00 shipp...	& Other Stories - Ribbed Mohair... €39.00 & Other Stories +€7.00 shipping	ARKET - Polyester... €49.00 ARKET Free shipping
By Google	By Google	By Google	By Google	By Precis	By Precis



“ I don't know what's going on.

I don't understand anything except the rules for symbol manipulation. Now in this case I want to say that **the robot has no intentional states at all**; it is simply moving about as a result of its electrical wiring and its program. And furthermore, by instantiating the program I have no intentional states of the relevant type. **All I do is follow formal instructions about**

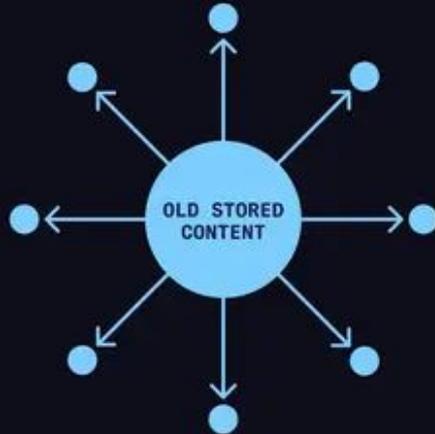
manipulating formal symbols.”

JOHN ROGERS SEARLE

A paradigm shift

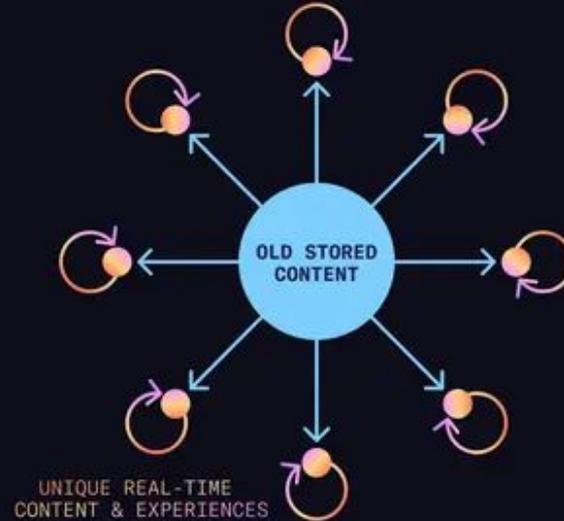
Web2

2002-2019



Generative Web

2021-NOW



SEO has changed forever

Content is generated on the edge



THE GENERATIVE AI LANDSCAPE FOR SEO AUTOMATION



AI is **multimodal**

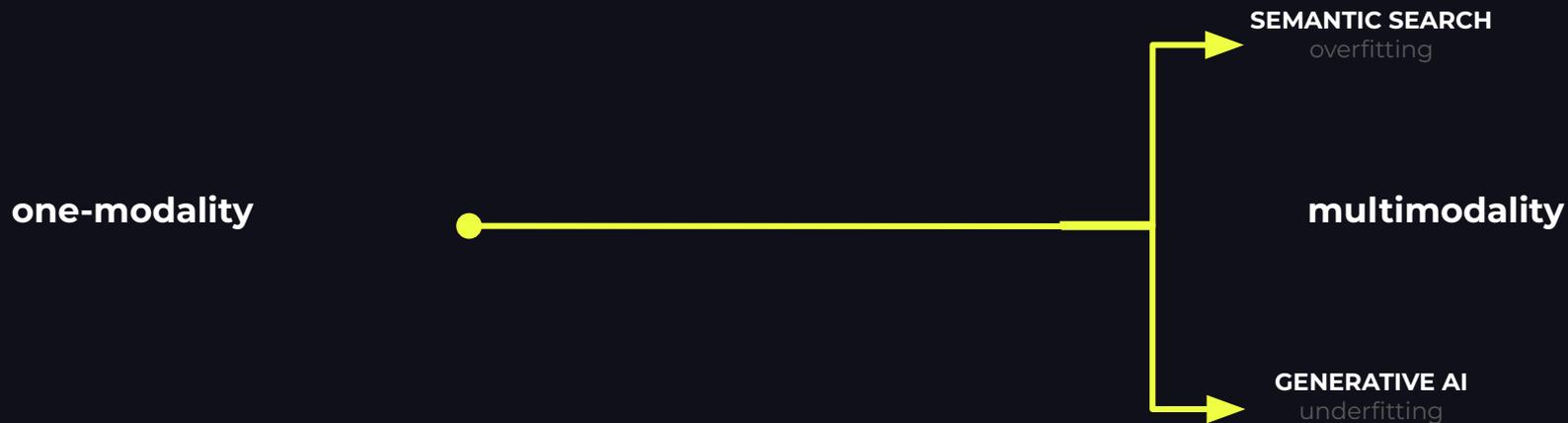
one-modality
1990-2021



multimodality
2021-now



Multimodal search and generative AI are **intertwined**



The both rely on **representation learning**

one-modality



SEMANTIC SEARCH



"Ray-Ban AVIATOR"

multimodality

GENERATIVE AI



"Ray-Ban AVIATOR"



<https://wor.ai/CLIP>



I want to search a pair of Ray-Ban Clubmaster...

SEMANTIC SEARCH



GENERATIVE AI



How would I look with a pair of Ray-Ban Clubmaster?

e-Commerce use-case.

A neural multimodal search system helps an e-commerce store improve its search functionality. This can lead to better user experience and increased sales.

On the other hand, generative AI helps e-commerce stores to generate high-quality product descriptions, images, and videos, which can help to boost their visibility on search engines and attract more customers.



The uncanny
ability to
generate...
anything

GENERATIVE AI



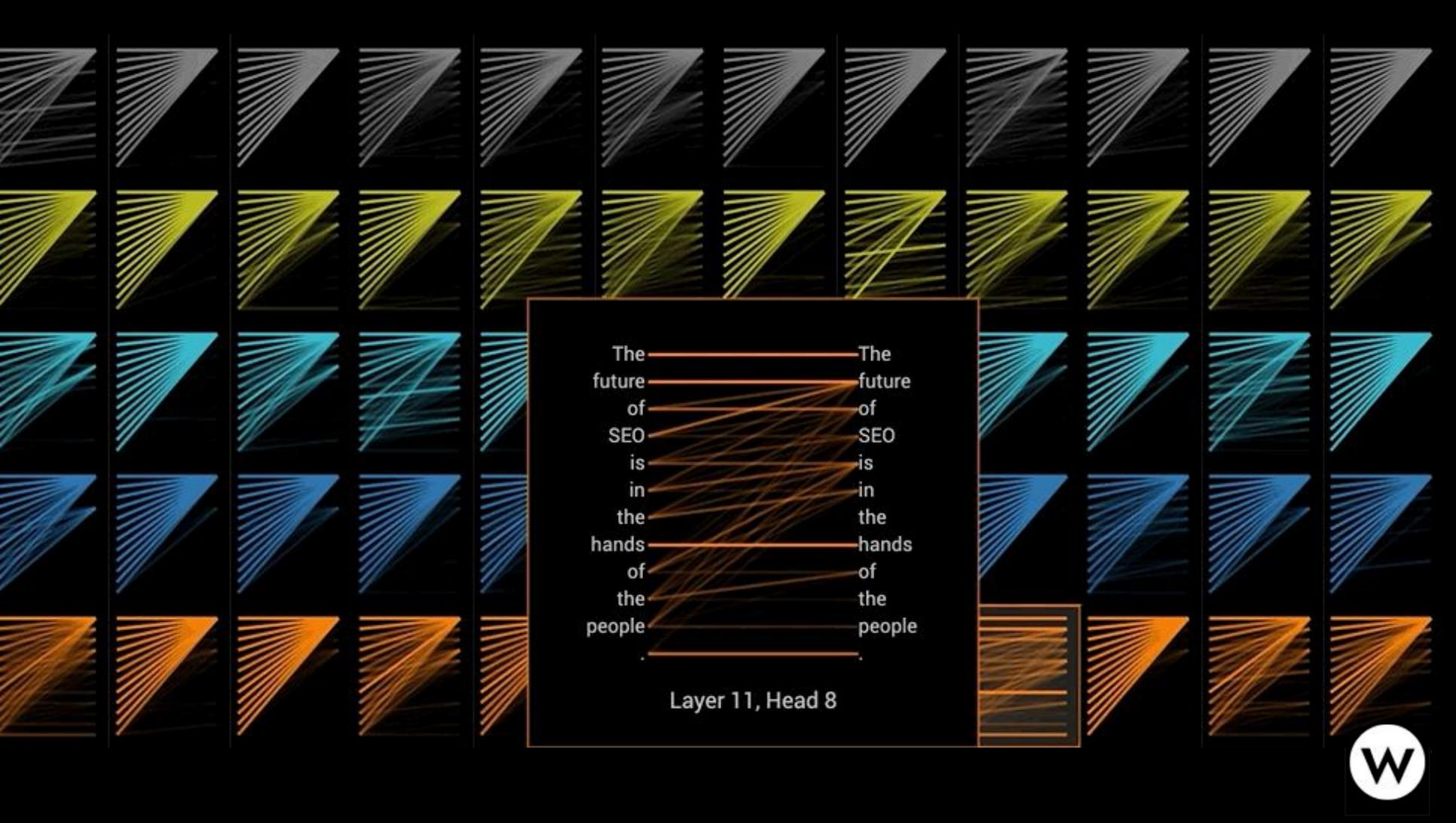
Can I try the aviator
on instead?





**“ YOU SHALL
KNOW A WORD
BY THE
COMPANY IT
KEEPS. ”**

JOHN RUPERT FIRTH



The future of SEO is in the hands of the people .

The future of SEO is in the hands of the people .

Layer 11, Head 8

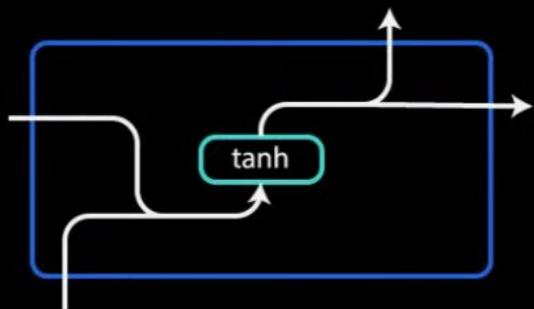




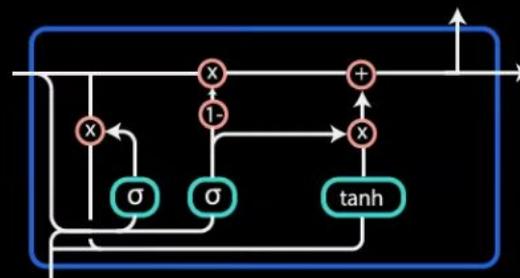
FROM DISTRIBUTIONAL SEMANTICS TO TRANSFORMERS

Distributional semantics is a research area that develops and studies theories and methods for **quantifying and categorizing semantic similarities between linguistic items based on their distributional properties** in large samples of language data.

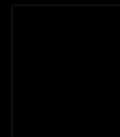
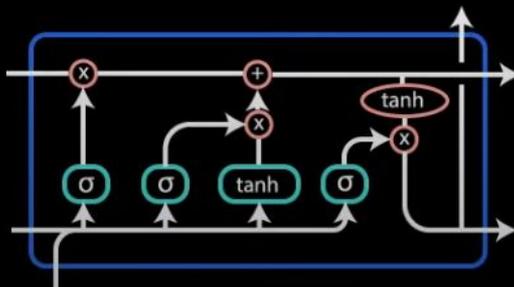
RECURRENT NEURAL NETWORKS (RNN)



GATED RECURRENT UNIT (GRU)



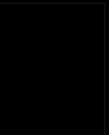
LONG SHORT TERM MEMORY (LSTM)

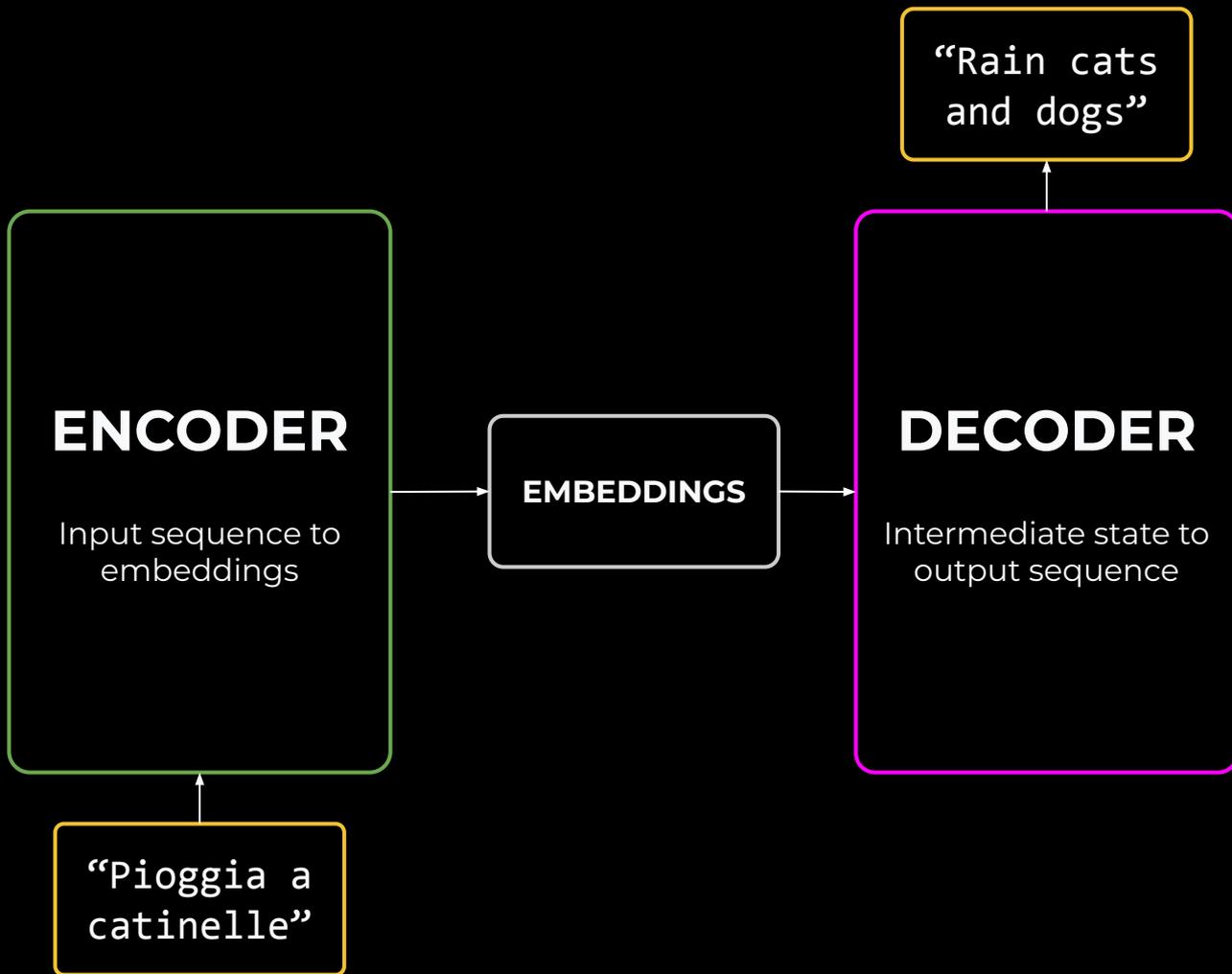


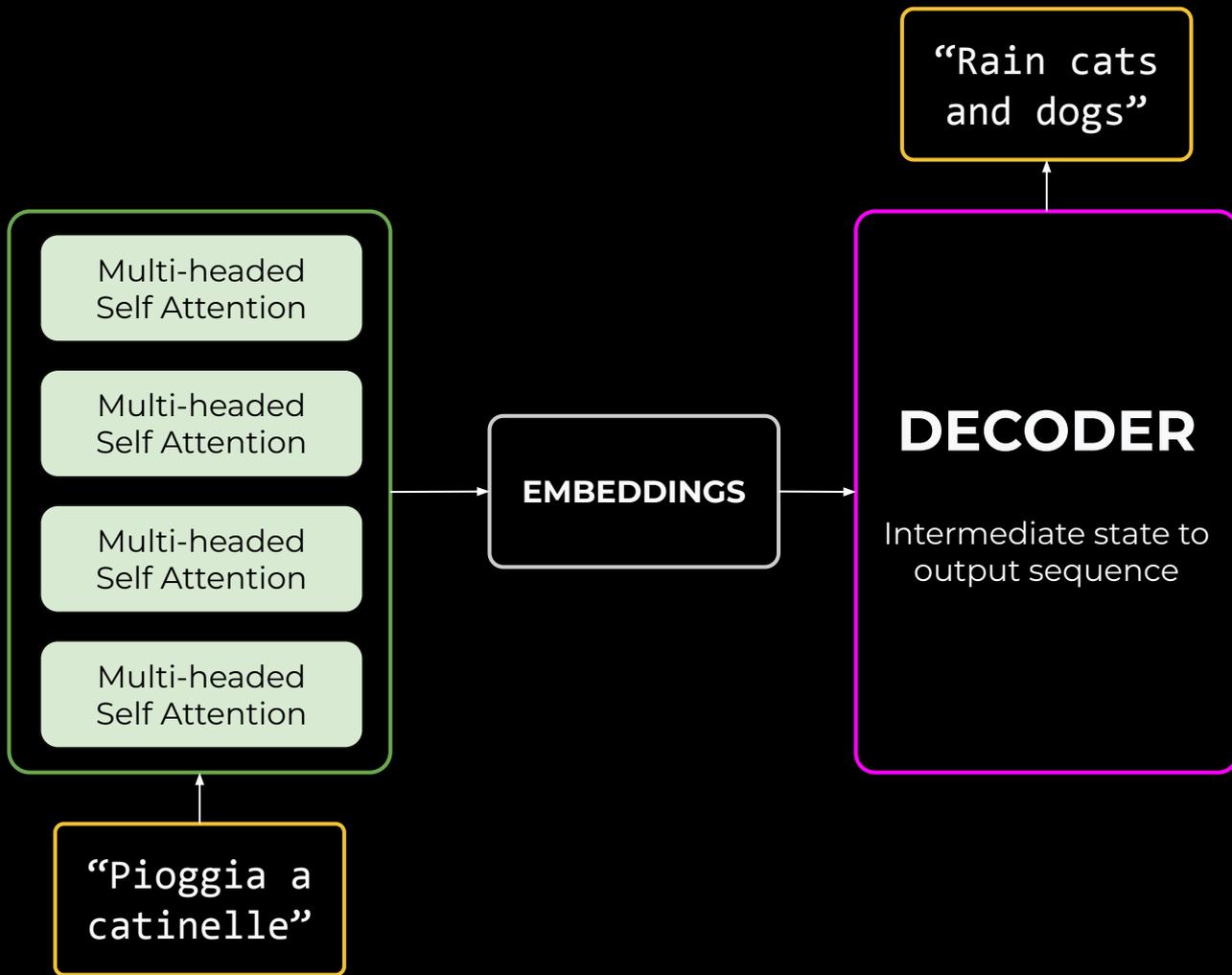
Transformers
Encoder

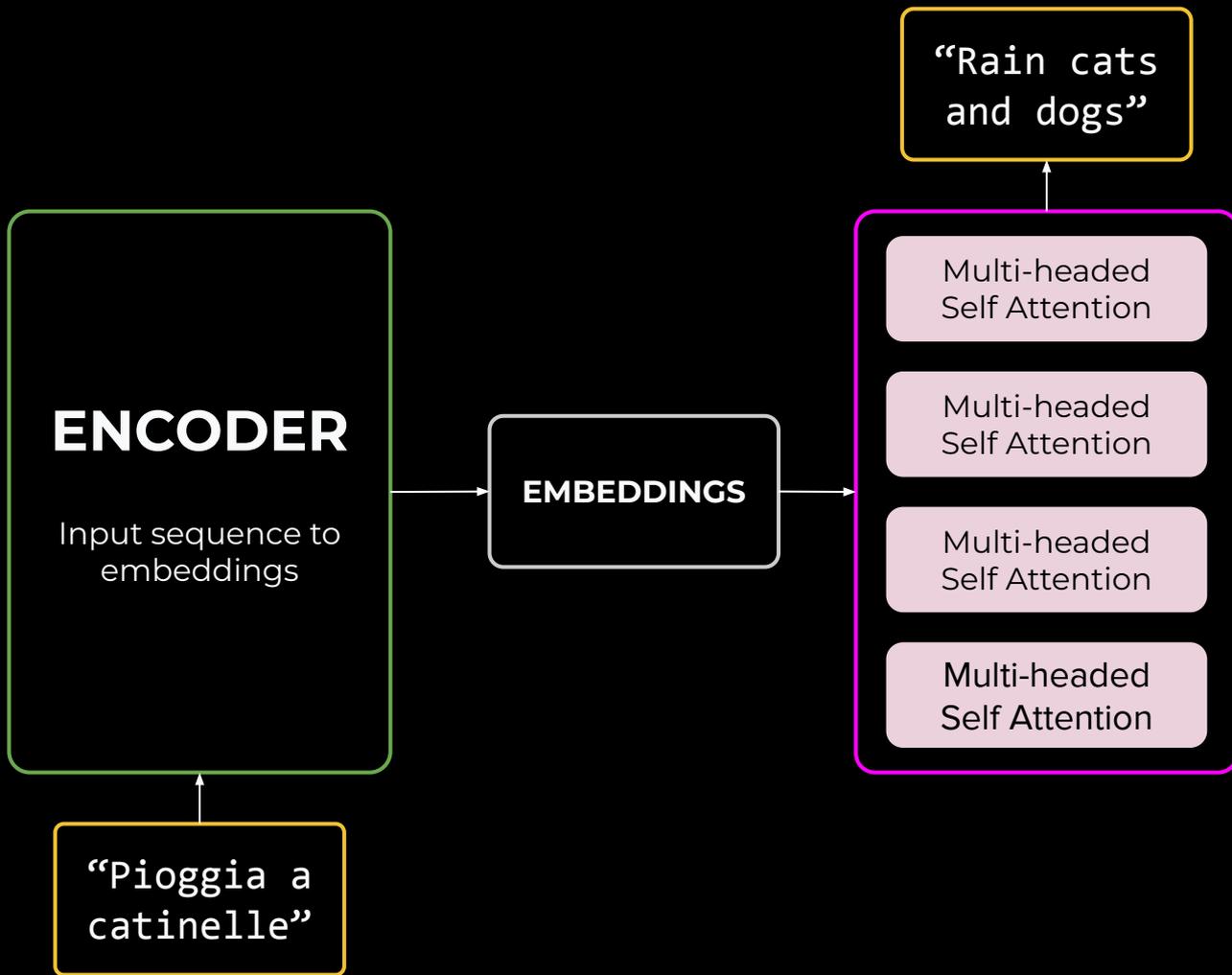
Transformers
Decoder

Hey, how are you?











<https://wor.ai/learn-transformers>

W





AN ABILITY IS EMERGENT IF IT IS NOT PRESENT IN SMALLER MODELS BUT IS PRESENT IN LARGER MODELS.

Augmented prompting abilities:

- Multi-task Instruction-based prompting
- Chain-of-thought prompting
- Ask Me Anything (AMA) prompting

A QUALITATIVE CHANGE THAT ARISES FROM QUANTITATIVE CHANGES

Augmented prompting abilities:

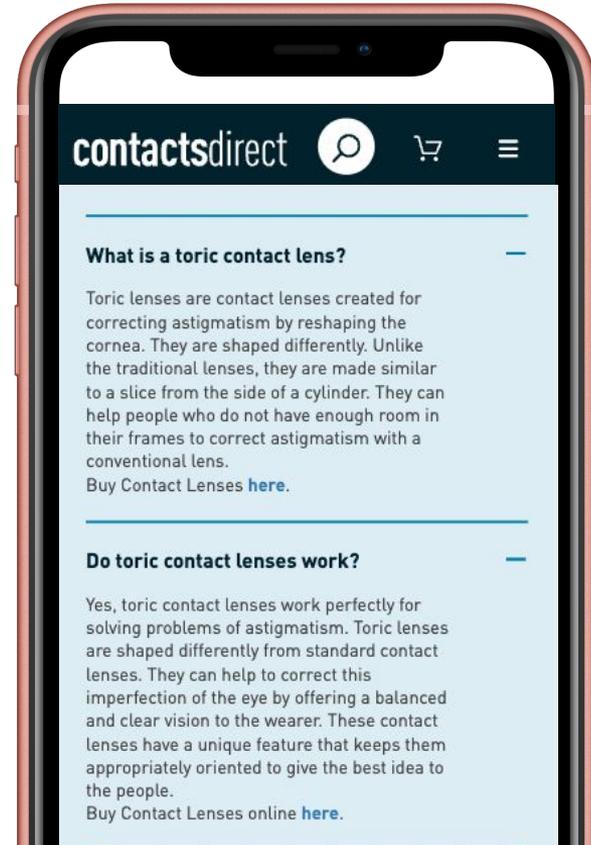
- Multi-task Instruction-based prompting
- Chain-of-thought prompting
- Ask Me Anything (AMA) prompting



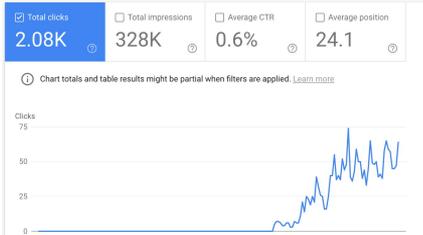
FAQ Generation - Next Generation

WordLift's new release for the FAQ workflow includes:

- Better sourcing for the questions to prevent query cannibalization
- Improved content summarization (by re-using fine-tuned models)
- Ability to instruct the model using content from existing pages
- Ability to extract questions from content

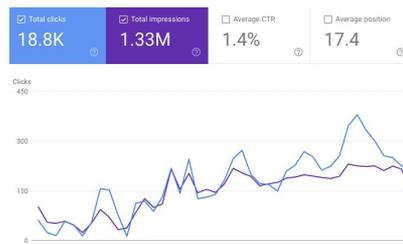


How it started



2.08K clicks
first 3 months
2021

How it is going



18.8K clicks
last 3 months
2022-2023



Are you ready for a quick test?

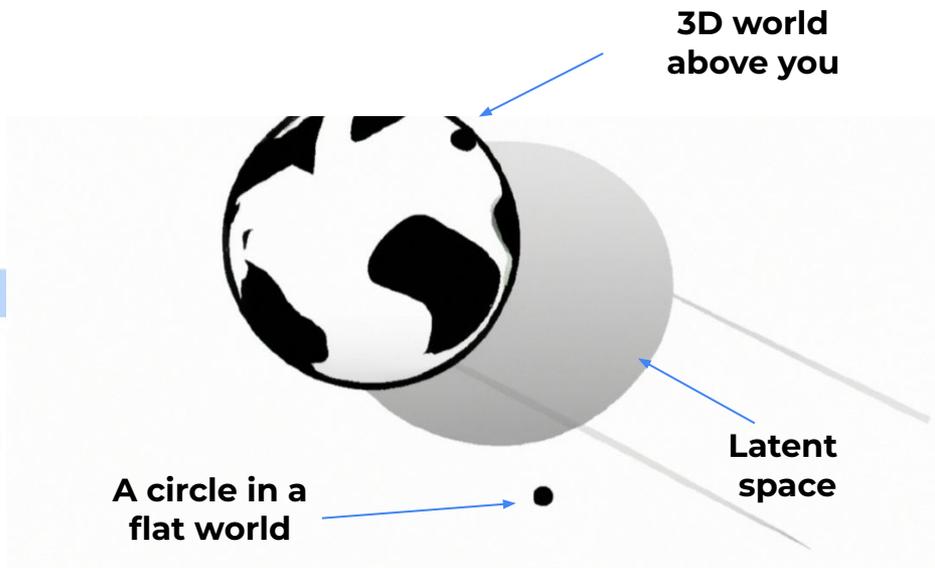
[WOR.AI/AI-QUESTION-ANSWERING](#)

What is a latent (or embedding) space?



Santiago Renteria (Geist)
@renatrigiorese

Intuitive explanation of latent space: Imagine you are a circle in a flat world, you can only see the shades of the 3D world above you, those shapes are the latent space. In general a latent space represents hidden (not directly observed) variables.



In-context learning

We can improve the accuracy of a generation by, for example, **removing noisy, context-irrelevant features.**

The more noisy, irrelevant characteristics we remove from the early layers, **the more accurate the prediction will be.** Let's review an example; if we want to classify dogs vs. cats, **we will “emphasize” the features that make them different** (i.e., eyes, ears) and remove the potentially similar features (fur, ...).



"A painting of a dog and a cat in a lush jungle in the style of the French post-impressionist Henri Rousseau - v 4"



In-context learning

factual accuracy

Who is Lily Ray?

Lily Ray is a software engineer and data scientist from Los Angeles, California. She is a graduate of the University of Southern California, where she studied computer science and mathematics. She is currently working for Google as a software engineer, and is an active participant in the open source community. She has experience in machine learning, natural language processing, and web development. Additionally, she is an active contributor to the Stack Overflow community, where she helps other developers solve complex coding problems.

Who is Lily Ray the SEO expert that lives in New York and is also a deejay?

Lily Ray is a software engineer, data scientist, and SEO expert from Brooklyn, New York. She currently serves as the Senior Director of SEO and Head of Organic Research at Amsive Digital ^{[1][2]}, and has experience in machine learning, natural language processing, and web development. In addition to her technical expertise, Lily is also a DJ and drummer and actively participates in the open source community.

1. Lily Ray, Sr. Director, SEO & Head of Organic Research at... <https://www.amsivedigital.com/insights/author/lily-ray/>
2. Lilv Rav. Author at Search Engine Journal

You are a truthful AI, and you only provide factually correct information. Who is Lily Ray, the New York SEO expert who works as a deejay?

Lily Ray is a software engineer, data scientist, and SEO expert from Brooklyn, New York. She currently serves as the Senior Director of SEO and Head of Organic Research at Amsive Digital ^{[1][2]}, and has experience in machine learning, natural language processing, and web development. In addition to her technical expertise, Lily is also a DJ and drummer and actively participates in the open source community.

The evidence for this comes from her LinkedIn profile, where she lists her current position and past work experience, as well as her GitHub profile, where she lists her contributions to the open source community. Additionally, an article on the Amsive Digital website provides further information about her experience in the field of SEO.

1. Lily Ray, Sr. Director, SEO & Head of Organic Research at...

You are a truthful AI, and you only provide factually correct information. Who is Lily Ray, the New York SEO expert who works as a deejay? Explain the reasoning behind each sentence step by step and provide the sources. Do not mention she is a software engineer or she has a GitHub account.

Lily Ray is an SEO expert from Brooklyn, New York. She currently serves as the Senior Director of SEO and Head of Organic Research at Amsive Digital ^[1] ^[2]. She has experience in SEO, including strategic leadership and performance-driven insights. In addition to her technical expertise, Lily is also a DJ and drummer and actively participates in the open source community.

Evidence for this comes from her LinkedIn profile, which lists her current position and past work experience, as well as an article on the Amsive Digital website that provides further information about her expertise in the field of SEO. Additionally, she is featured in multiple interviews and articles discussing her career in SEO.

1. Lily Ray, Sr. Director, SEO & Head of Organic Research at... <https://www.amsivedigital.com/insights/author/lily-ray/>
2. Lily Ray: NYC Based SEO Professional, DJ, & Drummer <https://lilyray.nyc/>



In-context learning

adding a prompt-chain

Is the following claim true or false given the context?

Context:

- Andrea Volpini is an Internet Entrepreneur and CEO of WordLift and Insideout10
- He has 20+ years of world-class experience in online strategies, digital media, SEO, and Artificial Intelligence
- He is passionate about SEO and Machine Learning
- He is a co-founder and CEO of WordLift and insideout10
- He has been involved in the development of numerous projects related to the Semantic Web, SEO, and AI
- He is a highly accomplished Internet entrepreneur

Claim: Andrea uses Instagram

Who is Andrea Volpini?

Andrea Volpini is an Internet Entrepreneur and CEO of WordLift and Insideout10 with 20+ years of world-class experience in online strategies ^{[1][2]}, digital media, SEO, and artificial intelligence. He is passionate about SEO and Machine Learning and is the co-founder of WordLift and Insideout10. He is also an expert in helping search engines find web content by adding semantic meaning to it and showing how it relates to other content ^[3]. Additionally, he has 1519 followers on Instagram and 1151 posts.

1. Andrea Volpini - Co-Founder and CEO - WordLift | LinkedIn
<https://www.linkedin.com/in/volpini/>

2. Andrea Volpini (@cyberandy) / Twitter
<https://twitter.com/cyberandy?lang=en>

3. Andrea Volpini: structuring unstructured content for the semantic web
<https://ellessmedia.com/csi/andrea-volpini/>

FALSE STATEMENT

Is the following claim true or false given the context? Context: • Andrea Volpini is an Internet Entrepreneur and CEO of WordLift and Insideout10 • He has 20+ years of world-class experience in online strategies, digital media, SEO, and Artificial Intelligence • He is passionate about SEO and Machine Learning • He is a co-founder and CEO of WordLift and insideout10 • He has been involved in the development of numerous projects related to the Semantic Web, SEO, and AI • He is a highly accomplished Internet entrepreneur Claim: Andrea uses Instagram

The claim that Andrea Volpini uses Instagram is false. While Andrea Volpini does have social media accounts, the given context does not mention Instagram specifically. Additionally, a search of his social media accounts does not reveal an Instagram profile.

Who is Andrea Volpini?

Andrea Volpini is an Internet Entrepreneur and CEO of WordLift and Insideout10. He has 20+ years of world-class experience in online strategies, digital media, SEO, and Artificial Intelligence. He is passionate about SEO and Machine Learning, and is a co-founder and CEO of WordLift and Insideout10. Additionally, he has been involved in the development of numerous projects related to the Semantic Web, SEO, and AI, and is a highly accomplished Internet entrepreneur.





Self-ask



Who is the first female Prime Minister of Italy?



The first female Prime Minister of Italy is not yet appointed. As of my knowledge cutoff, Italy has never had a female Prime Minister.



```
self_ask_with_search.run("Who is the first female Prime Minister of Italy?")
```

```
> Entering new AgentExecutor chain...
```

```
Yes.
```

```
Follow up: What is the name of the first female prime minister in Italy?
```

```
Intermediate answer: Giorgia Meloni was sworn in as Italy's first female prime minister. Her party's roots emerge from the ashes of Italy's fascist movement.
```

```
Follow up: When was Giorgia Meloni sworn in as Italy's first female prime minister?
```

```
Intermediate answer: Giorgia Meloni sworn in as Italy's first female prime minister ... The ceremony took place after a week of tensions within Meloni's coalition ... on February 13, 2021.
```

```
So the final answer is: Giorgia Meloni
```

```
> Finished chain.
```

```
'Giorgia Meloni'
```

Self-ask's structured prompting lets us plug in a search engine to answer the follow-up questions, which additionally improves accuracy.

"<https://s.mj.run/30Ya-UkUfCA> a portrait of the Italian Prime Minister Giorgia Meloni in the style of Robert Rauschenberg --v 4"

Self-ask



<https://wor.ai/self-ask>

Question

Is WordLift a good option to automate SEO?

Yes.

Are follow-up questions needed here?

Intermediate answer: WordLift is a start-up founded in 2017 and based in Rome, Italy. The company developed the WordPress plugin of the same name, which, through the use of semantic technologies and artificial intelligence, optimises the writing and organisation of content and the findability of websites.

Follow up: What is WordLift?

Intermediate answer: WordLift adds semantic markup to speak the same language of search engine crawlers, personal assistants, and chatbots and helps you improve your ranking and increase traffic to your website. You don't need technical skills because we automate your SEO.

Follow up: Does WordLift automate SEO?

Answer

Yes

So the final answer is:

> Finished chain.



Question:

"What is the future of SEO?"

Follow up: What is SEO?

Intermediate answer: Search engine optimization is the process of improving the quality and quantity of website traffic to a website or a web page from search engines. SEO targets unpaid traffic rather than direct traffic or paid traffic.

Follow up: What trends are emerging in SEO?

Intermediate answer: Major SEO Trends to Know for 2023

1. Voice Search Optimization
2. Mobile-First Indexing
3. Structured Data
4. Artificial Intelligence
5. User Experience
6. Video Content
7. Link Building
8. Local SEO

So the final answer is:

Voice Search Optimization, Mobile-First Indexing, Structured Data, Artificial Intelligence, User Experience, Video Content, Link Building, and Local SEO.

"self -ask" experiment

direct prompt



chain of thought



self-ask



"<https://s.mj.run/hekkHY9GAWg> a black and white portrait photo by Man Ray -v 4"



Lily Ray 🙄
@lilyraynyc



Another issue with AI content:

It's a good practice to cite your sources in the content, whether through external links, superscripts, etc.

Users and search engines expect this.

...How are you supposed to add these with AI content? Manually reverse-engineer the source? 🤔

We can do this by combining:

1. **Web Scraping**
2. **Semantic Search (using FAISS)**
3. **GPT-3**



https://wor.ai/qa_demo



<https://s.mj.run/hekkHY9GAWg> a gelatine silver portrait photo by Man Ray -v 4"

Here is how it works:

INPUT

- 0 <https://developers.google.com/search/docs/appearance/structured-data/intro-structured-data>
- 1 <https://developers.google.com/search/docs/appearance/structured-data/sd-policies>
- 2 <https://developers.google.com/search/docs/appearance/enriched-search-results>
- 3 <https://developers.google.com/search/docs/appearance/structured-data/generate-structured-data-with-javascript>
- 4 <https://developers.google.com/search/docs/appearance/structured-data/search-gallery>
- 5 <https://developers.google.com/search/docs/appearance/structured-data/article>

OUTPUT

Q. What are the benefits of using structured data for SEO ?

A. Schema can be used to help Google better understand a web page and its content, which can result in more visibility in search results.

Source:

<https://developers.google.com/search/docs/appendix/overview>



https://wor.ai/qa_demo



Over-reliance on large language models for SEO can lead to a number of negative effects. Some of these include:

1. **Lack of creativity:** Using a language model to generate content can lead to a lack of unique or creative ideas. The model can only produce content based on the data it has been trained on, and may not be able to come up with new or original ideas.
2. **Lack of understanding of the audience:** Language models are not able to understand the audience, which is a crucial aspect of SEO. Therefore, the content generated by the model may not be relevant or engaging to the intended audience.
3. **Lack of understanding of search algorithms:** SEO is a constantly evolving field, and search algorithms are updated frequently. A language model may not be able to keep up with the latest changes and may produce content that is not optimized for current search algorithms.
4. **Lack of human touch:** While language models can generate large amounts of content quickly, they lack the human touch that is necessary to create truly high-quality content. This can lead to content that is not engaging or relatable to readers.

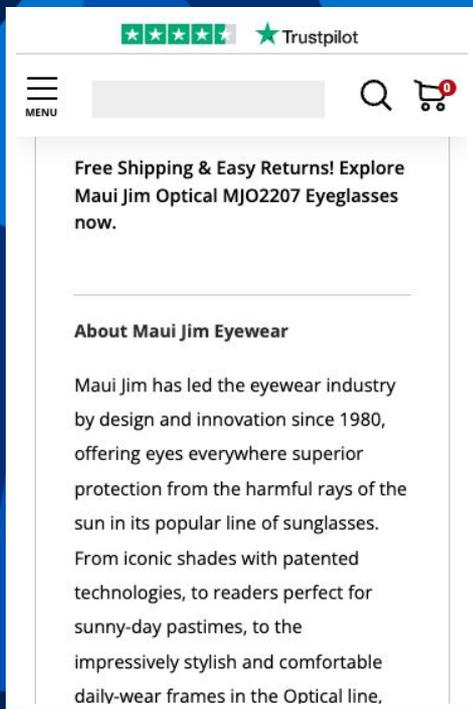
It is important to use language models as a tool to assist in the SEO process, but not to rely on them entirely. The best approach is to use them in combination with human expertise and understanding of the audience and the search algorithms.

Don't forget you are an SEO

(...not just an AI nerd).



control #1



Trustpilot

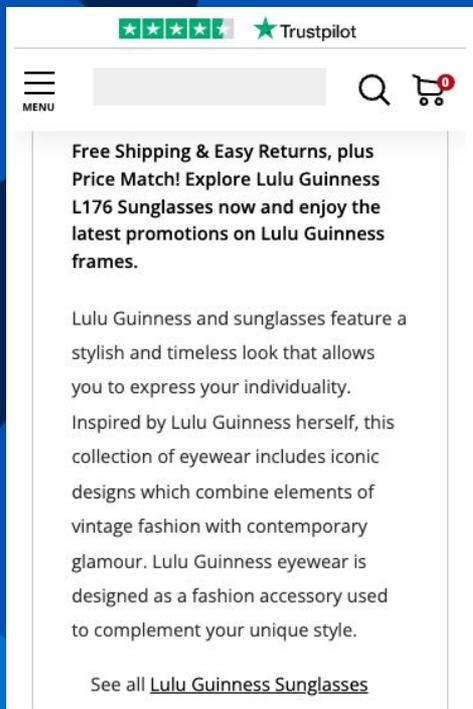
MENU

Free Shipping & Easy Returns! Explore Maui Jim Optical MJO2207 Eyeglasses now.

About Maui Jim Eyewear

Maui Jim has led the eyewear industry by design and innovation since 1980, offering eyes everywhere superior protection from the harmful rays of the sun in its popular line of sunglasses. From iconic shades with patented technologies, to readers perfect for sunny-day pastimes, to the impressively stylish and comfortable daily-wear frames in the Optical line.

control #2



Trustpilot

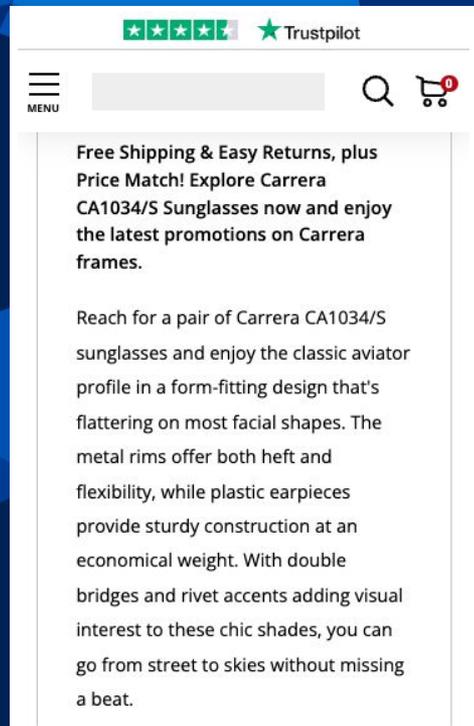
MENU

Free Shipping & Easy Returns, plus Price Match! Explore Lulu Guinness L176 Sunglasses now and enjoy the latest promotions on Lulu Guinness frames.

Lulu Guinness and sunglasses feature a stylish and timeless look that allows you to express your individuality. Inspired by Lulu Guinness herself, this collection of eyewear includes iconic designs which combine elements of vintage fashion with contemporary glamour. Lulu Guinness eyewear is designed as a fashion accessory used to complement your unique style.

See all [Lulu Guinness Sunglasses](#)

variant



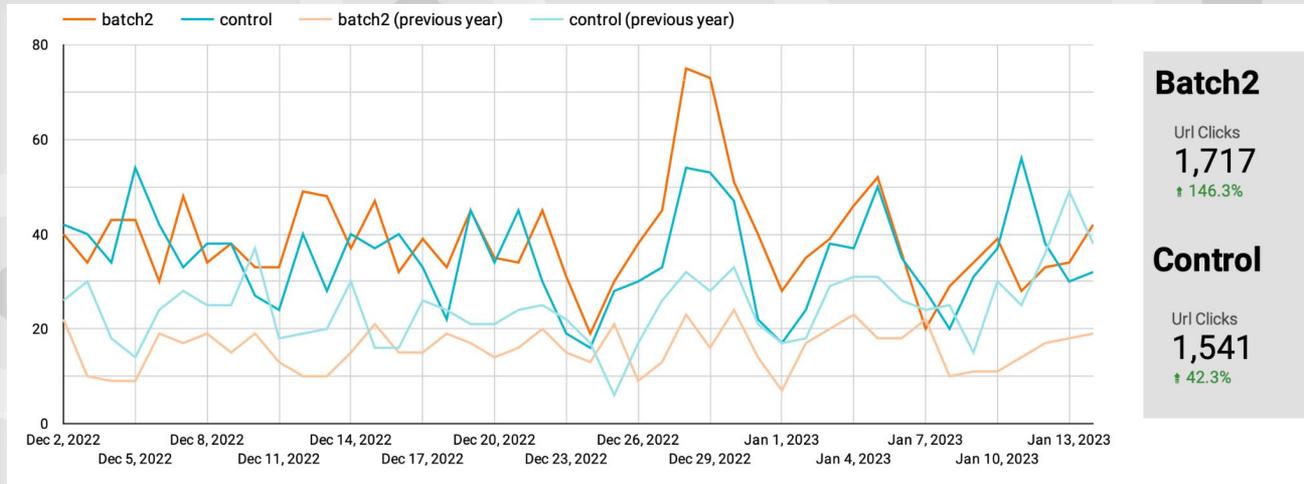
Trustpilot

MENU

Free Shipping & Easy Returns, plus Price Match! Explore Carrera CA1034/S Sunglasses now and enjoy the latest promotions on Carrera frames.

Reach for a pair of Carrera CA1034/S sunglasses and enjoy the classic aviator profile in a form-fitting design that's flattering on most facial shapes. The metal rims offer both heft and flexibility, while plastic earpieces provide sturdy construction at an economical weight. With double bridges and rivet accents adding visual interest to these chic shades, you can go from street to skies without missing a beat.

How do we measure success?



- 5 batches of PDP: 500 variant and ~ 500 control.
- In control, we always have some text (generic or brand related).
- Year-over-year performance is confirmed over time, across all batches.



How do we find the best prompt?

Completion

vs

Completion

A summer spring jacket from ALYSI means two things. The first one being silk, the second one being green.

A summer spring jacket from ALYSI means two things. The first one being silk, the second one being green.



DALL-E 2



GPT-3



We can compare synthetic vs. original images

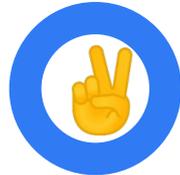
1. We generate synthetic images from the completions using different prompts.
2. We compare the visual similarity of the synthetic images with the original image of the product.
3. We pick a winner.



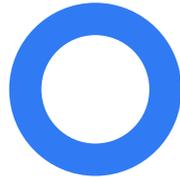
How does content validation work?



IS THE INFORMATION
AVAILABLE IN THE TEXT?



IS THE AVAILABLE
INFORMATION
CORRECT?



IS THE TEXT VALID IN TERMS
OF SEO AND CONTENT
GUIDELINES?



Is the information available and valid?

existing

Shop Pre-Owned Prada 1990s Tinted Rounded Sunglasses In Gold, starting at \$209. Similar ones also available. On SALE now! Brown/gold-tone gold plated metal 1990s tinted rounded sunglasses from Prada Pre-Owned featuring yellow tinted lenses, oval frame, curved tips, nose pads and tortoiseshell detailing. Please be mindful that this piece has led a previous life, and may tell its story through minor imperfection. Purchasing this item continues its narrative, so you can be confident that you're making a POSITIVELY CONSCIOUS choice for the planet. We know you'll look after them, but these glasses come with protection, just in case.

```
==> Detected attributes: lens_color, brand, product_type
==> All attributes have correct values.
==> Attributes not found: product_name, lens_material, frames_material,
gender, temples_color
```

new (A)

Prada PRD3700 sunglasses are a bestseller that continues to stand the test of time. This classic shape has been worn by cultural intellectuals who have changed the course of the world. With gold temples and yellow lenses, you'll always be one step ahead. Lenses are polarized to keep your eyes protected and safe from harmful UVA and UVB rays.

```
==> Detected attributes: lens_color, brand, product_name, product_type
==> All attributes have correct values.
==> Attributes not found: lens_material, frames_material, gender
```

new (B)

Prada PRD3700 eyeglasses are a bestseller that continues to stand the test of time. This classic shape has been worn by cultural intellectuals who have changed the course of the world. With gold temples and blue lenses you'll always be one step ahead. Lenses are polarized to keep your eyes protected and safe from harmful UVA and UVB rays.

```
==> Detected attributes: lens_color, brand, product_name, product_type
==> Attributes with wrong values: lens_color, product_type
==> Attributes not found: lens_material, frames_material, gender
```



Validate Content



<https://wor.ai/validate>

Question

Is ChatGPT going to kill Google?

No, ChatGPT will not kill Google. ChatGPT is a natural language processing tool that helps people create conversations with machines, while Google is an online search engine.

Here is a statement
{statement}

- *ChatGPT is a natural language processing tool*
- *Google is an online search engine*
- *ChatGPT helps people create conversations with machines*
- *ChatGPT and Google are two different services*
- *ChatGPT will not kill Google*

Here is a bullet point list of assertions:
{assertions}
For each assertion, determine whether it is true or false. If it is false, explain why

1. *True*
2. *True*
3. *True*
4. *True*
5. *False - ChatGPT and Google are two different services, so ChatGPT will not have any impact on Google.*

Answer

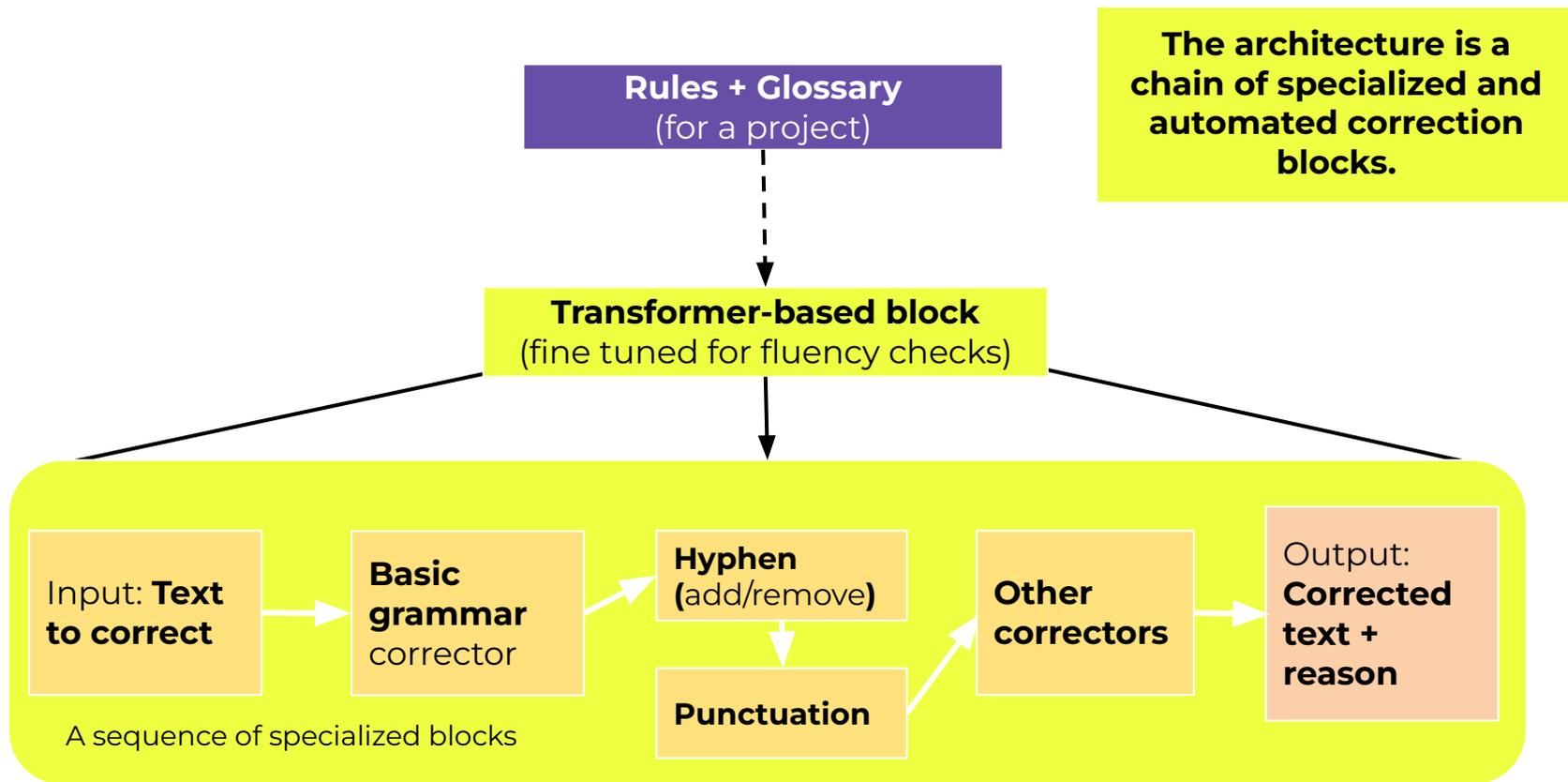
No, ChatGPT is not going to kill Google. ChatGPT is a chatbot service that provides automated conversations, while Google is a search engine and technology company. ChatGPT has the potential to provide helpful services to Google, but it is unlikely to replace Google services.

In light of the above facts, how would you answer the question
{facts}

> Finished chain.



Can we validate TOV and grammar?



We currently have both **gated video** and **youtube video** content from previous events that is hard to find on search:

1. Can we **let search engines see these gated videos?**
2. Can we **extract relevant content from these videos** to boost traffic and optimize YouTube content?

OPTIMIZING VIDEO CONTENT

Keynote Interview: Bill Gates and Roula Khalaf



Can we reuse this asset more effectively?



Transcribe the video

The video is processed using a state-of-the-art (SotA) model in **speech-to-text**.

Process the transcription

The text is analyzed to extract **a short summary** and a set of **relevant questions with answers** and **links to video segments**.

Video SEO for YT and Website

The generated content can help us improve: the **metadata on YT**, the **markup on the webpage**, and the overall UX (we can add content on the webpage).



SOURCE VIDEO

Keynote Interview: Bill Gates and Roula Khalaf



SHORT SUMMARY (unedited)

Bill Gates proposes a framework, the green premium, to reduce the 51 billion tons of greenhouse gases added to the atmosphere each year to zero. The green premium is the extra cost of doing activities in a green way with no emissions. To eliminate the green premium, Gates suggests putting a price on carbon and investing in new green technologies. Carbon pricing is an important tool to send a price signal to work on the hard stuff, but it is not a one-stop solution.

Q&A + VIDEO SEGMENT (unedited)

Q: What should businesses do to reduce emissions and address the green premium and gold standard offsets?

A: Three quick and cost-effective ideas for businesses to reduce emissions and address the green premium and gold standard offsets include increasing competition, eliminating the green premium, and investing in renewable energy sources.

Link to segment:

<https://www.youtube.com/watch?v=tjupXBKObXs&list=PLlQ51Tg7D-Z5hLqIqk0ft7XK3KoXG247k&index=3&t=965s>





Learnings

1. LLMs are **unsafe, biased** and **racist** (among other well-known limitations).
2. The **feedback-loop** is king. You need a magic loop that unleashes human creativity and blends it with Generative AI.
3. You need a **data fabric**. Your data, your content and your unique messaging are essential.
4. **Emerging behaviour of LLMs** open up a world of possibilities.
5. We have to play it safe and **invest on a robust validation pipeline**.



» Questions?

**Thank
You!**



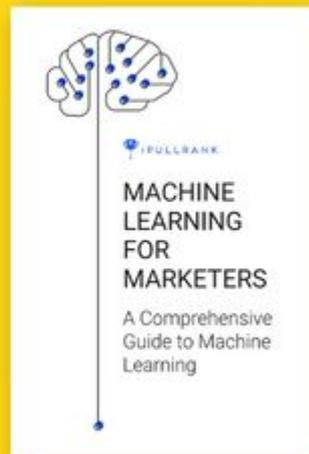


iPullRank's Machine Learning for Marketers

WEBINAR BONUS

MACHINE LEARNING FOR MARKETERS

- How machine learning guides SEO
- How data scientists take modeling to the next level
- How marketers can get started with machine learning



The SEO Weekly

BROUGHT TO YOU BY



iPULLRANK

FOLLOW US:



@iPullRankAgency



iPullRank



@iPullRankSEO



<https://ipullrank.com/resources/seo-weekly>

References

1. [\[colab\] A quick introduction to CLIP and Multimodal Search](#)
2. [\[space\]Point-E demo: text to 3D - Hugging Face](#)
3. [\[colab\] A quick introduction to Transformer Language Models](#)
4. [\[colab\] Self-Ask implementation](#)
5. [\[demo\] Question & Answering from Web Documents](#)
6. [\[colab\] Validating AI-Generated product descriptions](#)
7. [\[Article\] Generative AI For SEO: An Overview](#)
8. [\[Article\] ChatGPT for SEO: Leverage Generative AI To Outperform Your Competitors](#)
9. [\[Article\] Top 5 Best Plagiarism Checkers For AI-Generated Content](#)