Large Language Models: A Mirror of our Civilization

Josef Machytka
3 min read · Just now




This article was inspired by recent discussions about Large Language Models (LLMs) that I have observed. There's an old saying: "Don't be angry at the mirror if your face is less than ideal — it can only show you the truth." This proverb feels particularly relevant when discussing modern LLMs, though it requires a bit of explanation.

The Initial Hysteria

In the spring of 2023 we all witnessed a wave of heated debates and alarmist articles condemning artificial intelligence as a dangerous force. Sensationalized headlines highlighted "clearly evil" AI responses, fueling a hysteria rooted in society's deepest fears and traumas. The discourse was often colored by dystopian narratives from films like "Terminator" and "The Matrix". Many companies even declared their intention to remain "AI-free" forever.

Yet, as is often the case with hysteria, it began to subside soon. And by autumn of 2023 many self-proclaimed “saviors of humanity” and “AI danger experts” quietly moved on to the next trending topic. Meanwhile, companies that had loudly rejected AI tools only months before began suddenly integrating them into their workflows. New, improved LLMs emerged, offering better and more reliable answers. Users also became more skilled at interacting with these models using prompt engineering techniques, creating more insightful and reliable outputs.

Garbage In, Garbage Out

Over time, one critical realization has come into sharper focus: LLMs are only as good as the data on which they are trained. The ages-old principle of machine learning and data science — “garbage in, garbage out” — has been vividly reaffirmed. These models are, in essence, mirrors reflecting the quality of the data they’ve been trained on. If we don’t like what we see, the issue lies not with the mirror but with what we have fed into it.

But the metaphor of the mirror goes even deeper. LLMs don’t just reveal the state of our collective knowledge — they also reflect human behavior, particularly in their limitations. The mechanisms behind their so-called “hallucinations” mirror how humans generate ideas or attempt to fill knowledge gaps. For LLMs, there’s no inherent concept of “right” or “wrong”; only “the most probable answer,” based on the patterns learned from their training data.

When faced with incomplete information, an LLM — like a student in an exam — draws on what it knows to construct the most plausible response. This can result in answers that sound dangerously convincing, even more appealing than strict truths, especially to users who lack expertise in the subject area. Amusingly, Mark Twain captured this phenomenon already at

the end of the 19th century when he wrote: “Truth can be stranger than fiction, because fiction is obliged to stick to possibilities.”

While “AI hallucinations” can pose genuine risks in fact-critical scenarios, they also offer fascinating parallels to human creativity. As I explored in a previous article on deliberate AI hallucinations, these outputs can serve also as rich sources of inspiration, depending on the context.

A Reflection of Our Civilization

Ultimately, publicly available LLMs act as profound tools of reflection. They reveal not only the strengths and biases of the data we train them on, but also the ways humans think, reason, and make errors.

LLMs expose our potential for insight and creativity, alongside the dangers of misinformation and overconfidence. In doing so, they hold up a mirror to our civilization, challenging us to confront both our brilliance and our flaws.

Like any mirror, LLMs don’t create what they show; they simply reflect it. Whether we choose to embrace learning from this reflection and will struggle to make ourselves better or we turn away from it and condemn it, is entirely up to us.

Image created by the author using DeepDreamGenertor

Large Language Models | Artificial Intelligence | LIm | AI

Written by Josef Machytka

37 Followers · 7 Following

Edit profile

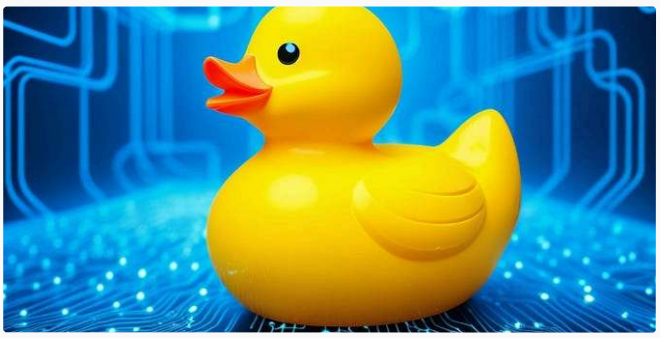
I work as Professional Service Consultant - PostgreSQL specialist in NetApp Deutschland GmbH, Open Source Services division.

No responses yet

What are your thoughts?

Respond

More from Josef Machytka



Josef Machytka

Extending DuckDB ETL Capabilities with Python

Josef Machytka

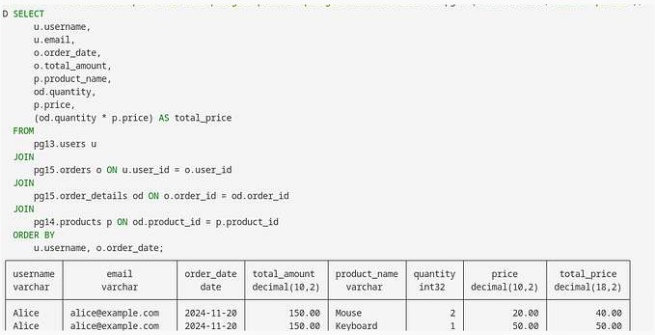
DuckDB as a Rudimentary Data Migration Tool

DuckDB has recently become my go-to solution for small ETL tasks. It is an...

Nov 24 20

After exploring how to use DuckDB as an intelligent ETL tool for PostgreSQL, and how...

Nov 30 1



Josef Machytka

Easy Cross-Database Selects with DuckDB

DuckDB was created with simplicity and ease of use in mind. In my previous article, I...

Nov 26 3

Josef Machytka

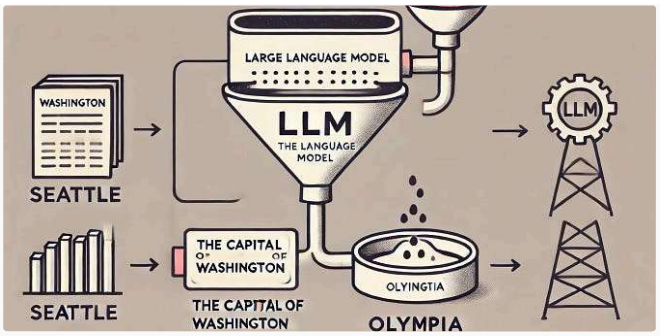
How DuckDB handles data not fitting into memory?

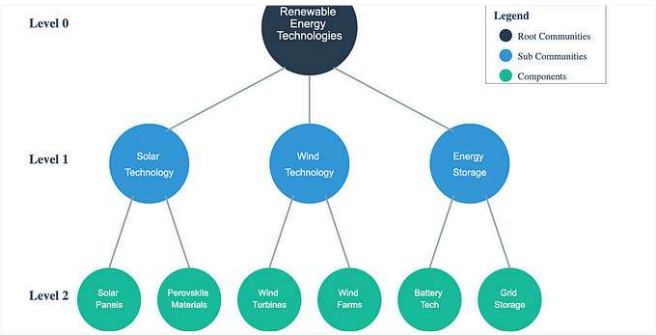
In my previous article about DuckDB I described how to use this database as an...

Nov 13 7

See all from Josef Machytka

Recommended from Medium





In AI Advances by Nikhil Anand

My LLM's outputs got 1000% better with this simple trick.

I wish I had known this trick sooner.

Dec 2 627 8

In Generative AI by Satyabrata Dash

Understanding Graph-based RAG Systems: A Deep Dive into...

The Need for Graph-based RAG Systems

Dec 8 155

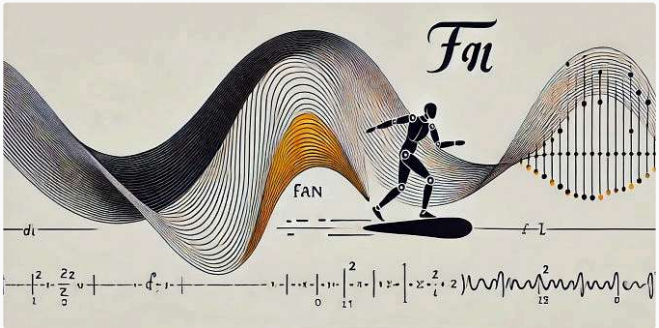
Lists

Natural Language Processing
1858 stories · 1487 saves

AI Regulation
6 stories · 649 saves

Generative AI Recommended Reading
52 stories · 1552 saves

What is ChatGPT?
9 stories · 485 saves



Sebastian Petrus

In Level Up Coding by Dr. Ashish Bamania

Someone Has Made an Uncensored Version of QwQ-32B-Preview, An...

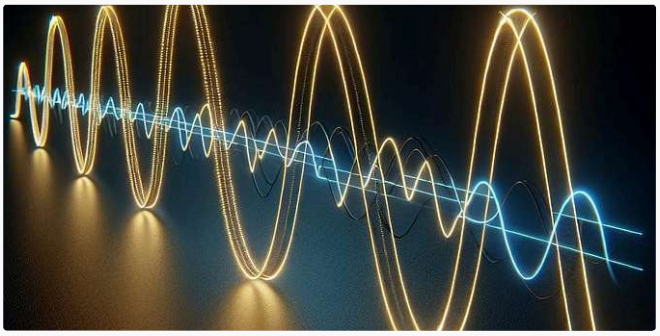
QwQ-32B-Preview is Awesome, and more powerful that GPT-4o-mini, but It Is Censore...

Dec 3 105

Fourier Analysis Networks (FANs) Are Here To Break Barriers In AI

A deep dive into Fourier Analysis Networks (FANs), a novel neural network architecture...

Dec 6 1.4K 18



In Towards Data Science by Nikos Kafritsas

TSMixer: Google's Innovative Deep Learning Forecasting Model

Combining lightweight design with high forecasting accuracy

3d ago 185 1

Ignacio de Gregorio

Why Amazon's AI Strategy is Finally Legit.

Finally, this week, Amazon officially became a strong player in the frontier AI scene, all the...

6d ago 1K 28

See more recommendations