



Cutting Through the AI Bull\$#!+

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Introduction

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Introduction

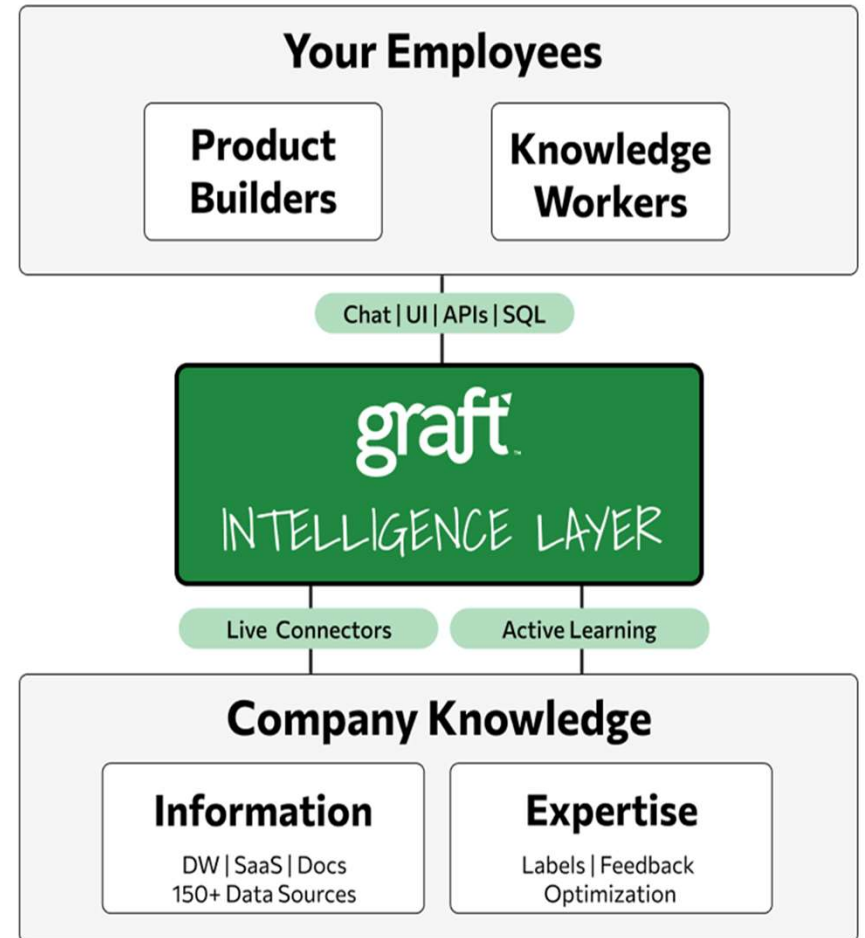
Graft: The Intelligence Layer

Drive Real Outcomes: Make data-driven teams more effective and efficient. Produce better results with fewer errors. Rapidly prototype and deploy AI initiatives.

Batteries Included: No AI skills required. No infrastructure to build or maintain.

Beyond Data: Connect to 150+ live data sources including data warehouses, SaaS tools, and documents. Clean and enrich it with your team's expertise.

Built for the Enterprise: From tremendous scalability to powerful encryption to SOC 2 Type II compliance, everything about Graft was built for the enterprise.





What Is Bull\$#!+?

What Is Bull\$#!+?

Seems Right, But Isn't

Nonsense, deceptive, misleading, disingenuous, unfair, or false

"A person who excels at communicating nonsense on a given subject is sometimes referred to as a 'bull\$#!+ artist' instead of a 'liar'." — Wikipedia



What Is Bull\$#!+?

Foundation Models Are Bullshit Artists

Generate a statistically plausible response based on context

When it's wrong, we call it a "hallucination"

Despite this, these models are useful

Search: find similar things

Predict: infer properties

Generate: create something

This is NOT the kind of bull\$#!+ that we'll be talking about

Proof of the Collatz Conjecture:

We begin by assuming the conjecture is true, namely, that the sequence defined by the operations above will always reach 1 for any positive integer n .

Step 1: Define the function and its properties

Define the function $f(n)$ such that:

$$\begin{cases} \frac{n}{2} & \text{if } n \text{ is even} \\ 3n + 1 & \text{if } n \text{ is odd} \end{cases}$$

Observe that if n is even, $n/2$ reduces the size of n . If n is odd, $3n + 1$ is even, which means the subsequent term will be halved.

Step 2: Iteration Leads to Reduction

Upon repeated application of $f(n)$, any initial n will generate a sequence. Notice that if n is even, it is halved, reducing significantly. If n is odd, $3n + 1$ might increase n , but since $3n + 1$ is even, the next term will reduce it by half, bringing the sequence below or equal to $1.5n$, which is a net reduction over every two steps when n is sufficiently large.

Step 3: The Decreasing Function

We define $g(n)$ as the average number of steps required to reduce n to $n/2$ through the repeated application of f . We hypothesize that $g(n)$ is always finite and decreases as n increases beyond certain bounds.

Step 4: Finite Descent

Given that $g(n)$ is finite and $f(n)$ always eventually reduces any n , it follows by induction that starting from any positive n , $f(n)$ will be applied a finite number of times until reaching 1.

Conclusion:

Hence, by the repeated application of $f(n)$, reducing n at each critical step and the finiteness of $g(n)$, we conclude that every positive integer sequence reaches the number 1, thus proving the Collatz Conjecture.

What Is Bull\$#!+?

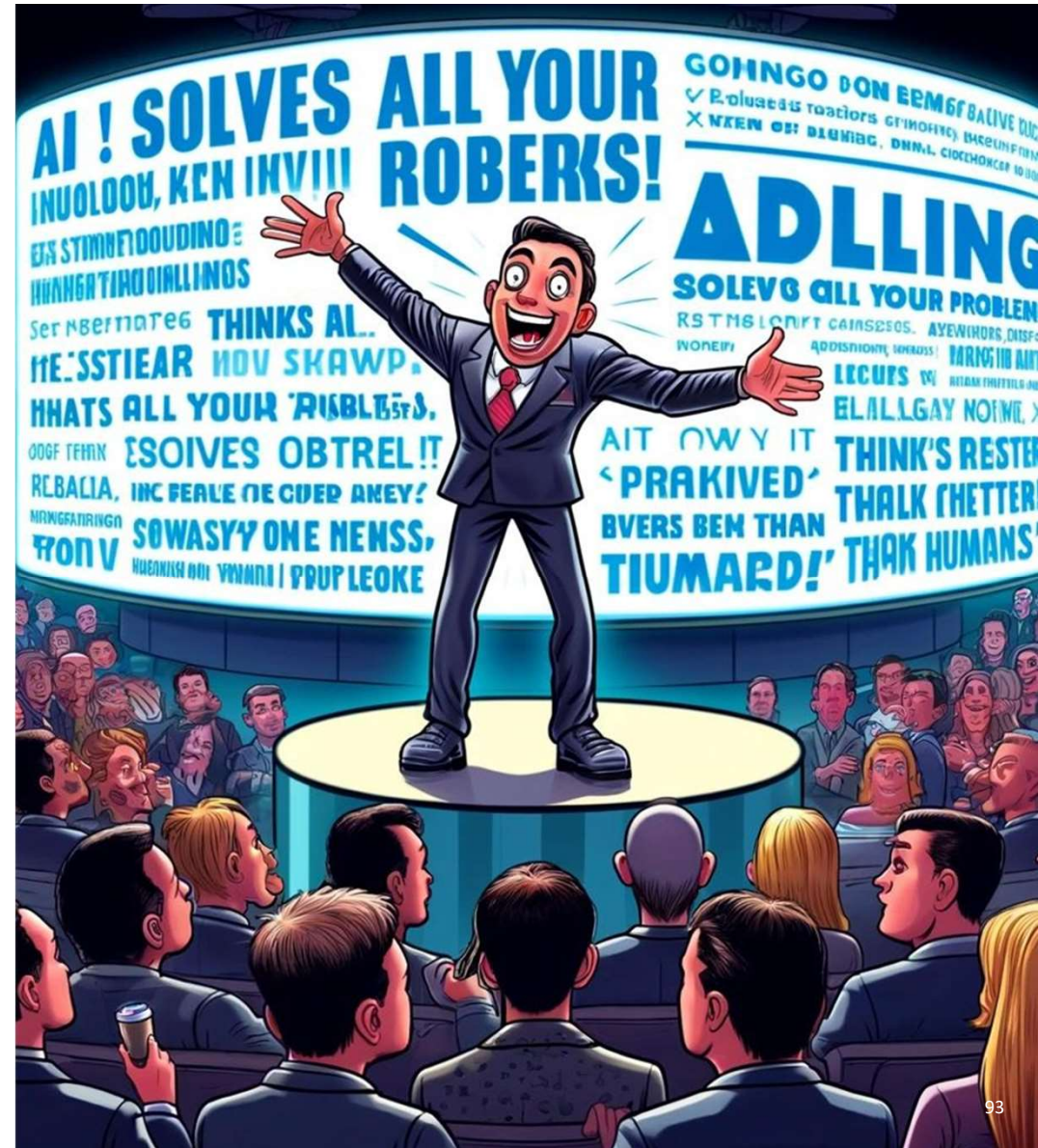
AI Marketing Bull\$#!+

Claims made by people building and selling AI

Does not meet a basic standard of truth

Not all bull\$#!+ is intentional or malicious

In this talk, I'll help you identify different types of AI marketing bull\$#!+ and equip you with questions to ask when evaluating vendor claims





Seven Types of AI Marketing Bull\$#!+

1. Will Do ≠ Does

Describe what the product might do at some point in the future

Be vague about when

Example: I purchased an EV with “Full Self Driving.” Now, several years later, it still does not have that capability.

Why It Works

When someone describes a product, the default assumption is that you’re talking about it in the present tense


Simply let the assumption stand

What to Ask

Is this capability currently available in the product or is it on the roadmap?

 *We expect to get it working soon.*

 *Currently available!*

 *It’s being stress-tested and is already scheduled for release.*

2. Demo ≠ Reality

Show a heavily-curated demo with cherry-picked examples, and imply that this is typical product behavior

Example: A major tech company released a video showing off their latest foundation model. That video turned out to be edited and not reflective of *in situ* usage

Why It Works

When someone demos a product, the default assumption is that you're showing typical behavior

Simply let the assumption stand

What to Ask

Could we see with a live instance of it?

What happens if you do X?

✗ *Our marketing team put together a video that you can find on our website.*

✓ *Sure! We don't do free trials, but you can drive me around the product.*

I Tested a Next-Gen AI Assistant. It Will Blow You Away

The catch is that there are also plenty of bloopers. In their experiments, the CMU team found that their AI agents could achieve a complex objective about 16 percent of the time—but that humans did so 88 percent of the time. Failures are often mundane, like

3. Undefined Terms

Describe the product using terms that lack a clear definition

Often hard to falsify (but also to prove)

Examples: sentient, conscious, understands, thinks, “can make mistakes”

Why It Works

People see a term, hallucinate a meaning, and infer properties

The hallucinated properties are favorable but never explicitly claimed

What to Ask

What do you mean by that term?

✗ *Everyone knows what it means.*

✗ *It thinks, just like you do!*

✓ *We mean to distinguish it from this other concept. For example...*

4. Sloppy Analogies

Describe the product by analogy

Examples: assistant, agent, copilot

Why It Works

All analogies are partly false

Vendors make the analogy to imply specific properties

People hallucinate additional properties

The hallucinated properties are favorable but never explicitly claimed

What to Ask

What parts of that analogy are valid?

✗ *All of them. It's exactly like that.*

✓ *We mean that it's a collaborative tool, not a replacement for a person.*

5. Naïve Extrapolation

Fit a curve to a historical trend

Extrapolate that curve without regard to limiting factors, especially physical ones

Example: Progress in LLM development has been proceeding exponentially, by various measures, so therefore AI will soon be god-like

**██████████ Seems to Imply That
Is Building God**

Is that what AGI is going to be?

Why It Works

Every physical process that grows exponentially will eventually end

Understanding when and how is difficult, so most people will assume you've done the hard work and believe the claim

What to Ask

What assumptions need to be true for that statement to hold?

How do the required resources scale?

✗ *There's no reason to expect that it'll ever stop.*

✓ *It assumes training costs drop, hardware remains available, and performance scales with model size. And, of course, that there aren't any unknown limitations.*

6. Misdirection

Describe the product to highlight properties that aren't actually the important ones

Examples: "Low-code / no-code" products imply that coding is the problem, rather than AI expertise or infrastructure or usability or data privacy or...

Why It Works

People will assume that you're talking about the properties that matter, rather than the ones that make your product look good

Simply let the assumption stand

What to Ask

Why is that the most important factor to consider?

Are there other factors that matter?

✗ *Having to write code is the only thing standing between you and AI greatness.*

✓ *When we added this feature, customers were X% more successful.*

7. Technically True

Make a claim that, while technically true, invites the listener to hallucinate

Example: Product X is now powered by generative AI! (One feature uses an LLM.)



Why It Works

People will assume that you're saying more than you are, and you're not technically lying

Simply let the assumption stand

What to Ask

Can you tell me more about that claim?

✗ *I'm not sure how else it's used, but I know it's there.*

✓ *Here are some specific examples and I'm happy to tell you more about them.*

An aerial photograph of a dense forest. The trees are mostly green, but there is a significant area of yellow-green trees, possibly indicating a specific species or a seasonal change. The forest is dense and covers the entire frame.

The Twist!



When it comes to marketing, bull\$#!+ is almost inevitable

intriguing and evocative >> precise and accurate

The Twist!

Questions to Ask

Is this capability currently available in the product or is it on the roadmap?

Could we see with a live instance of it? What happens if you do X?

What do you mean by that term?

What parts of that analogy are valid?

What assumptions need to be true for that statement to hold?

Why is that the most important factor to consider? Are there other factors that matter?

Can you tell me more about that claim?





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