

Panic Over DeepSeek Exposes AI's Weak Foundation On Hype

Eric Siegel Contributor

CEO of Gooder AI, author of “The AI Playbook” & “Predictive Analytics”

Follow



Feb 1, 2025, 10:46am EST

Updated Feb 1, 2025, 11:45am EST



The drama around DeepSeek builds on a false premise: Large language models are the Holy Grail. This ... [\[+\]](#) GETTY IMAGES

The story about DeepSeek has disrupted the prevailing AI narrative, impacted the markets and spurred a media storm: A large language model from China [competes with the leading LLMs from the U.S.](#) – and it does so without requiring nearly the costly computational investment. Maybe the

U.S. doesn't have the technological lead we thought. Maybe heaps of GPUs aren't necessary for AI's special sauce.

But the heightened drama of this story rests on a false premise: LLMs are the Holy Grail. Here's why the stakes aren't nearly as high as they're made out to be and the AI investment frenzy has been misguided.

Amazement At Large Language Models

Don't get me wrong – LLMs represent unprecedented progress. I've been in machine learning since 1992 – the first six of those years working in natural language processing research – and I never thought I'd see anything like LLMs during my lifetime. I am and will always remain slackjawed and gobsmacked.

LLMs' uncanny fluency with human language confirms the ambitious hope that has fueled much machine learning research: Given enough examples from which to learn, computers can develop capabilities so advanced, they defy human comprehension.

Just as the brain's functioning is beyond its own grasp, so are LLMs. We know how to program computers to perform an exhaustive, automatic learning process, but we can hardly unpack the result, the thing that's been learned (built) by the process: a massive neural network. It can only be observed, not dissected. We can assess it empirically by checking its behavior, but we can't understand much when we peer inside. It's not so much a thing we've architected as an impenetrable artifact that we can only test for effectiveness and safety, much the same as pharmaceutical products.

MORE FOR YOU

FBI Warns iPhone And Android Users—Stop Answering These Calls



Gmail Security Warning For 2.5 Billion Users—AI Hack Confirmed





Great Tech Brings Great Hype: AI Is Not A Panacea

But there's one thing that I find even more amazing than LLMs: the hype they've generated. Their capabilities are so seemingly humanlike as to [inspire a prevalent belief](#) that technological progress will shortly arrive at artificial general intelligence, computers capable of almost everything humans can do.

Forbes Daily: Join over 1 million Forbes Daily subscribers and get our best stories, exclusive reporting and essential analysis of the day's news in your inbox every weekday.

Sign Up

By signing up, you agree to receive this newsletter, other updates about Forbes and its affiliates' offerings, our [Terms of Service](#) (including resolving disputes on an individual basis via arbitration), and you acknowledge our [Privacy Statement](#). Forbes is protected by reCAPTCHA, and the Google [Privacy Policy](#) and [Terms of Service](#) apply.

One cannot overstate the hypothetical ramifications of achieving AGI. Doing so would grant us technology that one could install the same way one onboards any new employee, releasing it into the enterprise to contribute autonomously. LLMs deliver a lot of value by generating computer code, summarizing data and performing other impressive tasks, but they're a far distance from virtual humans.

Yet the far-fetched belief that AGI is nigh prevails and fuels AI hype. OpenAI optimistically boasts AGI as [its stated mission](#). Its CEO, Sam Altman, recently [wrote](#), "We are now confident we know how to build AGI as we have traditionally understood it. We believe that, in 2025, we may see the first AI agents 'join the workforce'..."

AGI Is Nigh: A Baseless Claim

“Extraordinary claims require extraordinary evidence.”

–Karl Sagan

Given the audacity of the claim that we’re heading toward AGI – and the fact that [such a claim could never be proven false](#) – the burden of proof falls to the claimant, who must collect evidence as wide in scope as the claim itself. Until then, the claim is subject to Hitchens's razor: “What can be asserted without evidence can also be dismissed without evidence.”

What evidence would suffice? Even the impressive emergence of unforeseen capabilities – such as LLMs’ ability to perform well on multiple-choice quizzes – must not be misinterpreted as conclusive evidence that technology is moving toward human-level performance in general. Instead, given how vast the range of human capabilities is, we could only gauge progress in that direction by measuring performance over a meaningful subset of such capabilities. For example, if validating AGI would require testing on a million varied tasks, perhaps we could establish progress in that direction by successfully testing on, say, a representative collection of 10,000 varied tasks.

Current benchmarks don’t make a dent. By claiming that we are witnessing progress toward AGI after only testing on a very narrow collection of tasks, we are to date greatly underestimating the range of tasks it would take to qualify as human-level. This holds even for standardized tests that screen humans for elite careers and status since [such tests were designed for humans, not machines](#). That an LLM can pass the Bar Exam is amazing, but the passing grade doesn’t necessarily reflect more broadly on the machine's overall capabilities.

Pressing back against AI hype resounds with many – more than 787,000 have viewed my Big Think [video saying generative AI is not going to run the world](#) – but an exhilaration that borders on fanaticism dominates. The recent market correction may represent a sober step in the right direction, but let's make a more complete, fully-informed adjustment: It's not only a question of our position in the LLM race – it's a question of how much that race matters.

Follow me on [Twitter](#) or [LinkedIn](#). Check out my [website](#) or some of my other work [here](#).



Eric Siegel

Follow

Eric Siegel is a former Columbia University professor who helps companies deploy machine learning. He is the cofounder and CEO of [Gooder AI](#), the founder... **Read More**

Editorial Standards

Forbes Accolades

ADVERTISEMENT

One Community. Many Voices. Create a free account to share your thoughts. Read our community guidelines [here](#).

 Log in

Be the first to comment...



No one seems to have shared their thoughts on this topic yet

Leave a comment so your voice will be heard first.

