NEWSLETTER

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Futuristic Outlook

Message from Co-Founder, Chief Advisor on Innovation, and Director ORIC/TISC – UMT

We live in the Modern age, where we do all over work with the help of technology. We know technology by the name "technological know-how". Discover the latest science and technology news and videos on breakthroughs shaping tomorrow's world with Futurism. The innovation of science has a long history producing many important figures and many developments in the field. Moreover, it made communication easier for us. Humans have cleaned up and created some fantastic and sometimes orthodox inventions.

So, every researcher and faculty member should be up-to-date about innovation in their respective field; that's why ORIC-UMT introduce the Futuristic Outlook for the UMT family to commensalism with the Innovative world.

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A - School of Engineering & School of System and Technology

1: City Shuts Down Geoengineering Experiment

In one California town, local officials have shut down the United States' first so-called "cloud-brightening" experiment even after an investigation found that it's safe for residents and the environment.

As the *New York Times* reports, the City Council in Alameda, California has voted to end its pioneering marine geoengineering experiments, which involved spraying tiny particles of sea salt off the deck of a decommissioned aircraft carrier in hopes of one day making clouds brighter and capable of reflecting sunlight away from our planet.

Undertaken by climate researchers from the University of Washington, the beginning of the sun-dimming experiments which, notably, had not yet begun seeding clouds with salt but were instead measuring the feasibility of the equipment being used made national news earlier this year, which per *CBS News* took Alameda Mayor Marilyn Ezzy Ashcraft by surprise.

Soon after that reporting, and after Tennessee banned similar experiments under the misguided notion that they constituted "chemtrails," city officials ordered the UW trial to a halt, claiming that the researchers hadn't been transparent about what they'd be doing. The council commissioned an environmental assessment to determine whether or not spraying salt into the sky could be harmful to natural or human health.

The ensuing environmental assessment found, as the *NYT* noted in a previous report, that the "chemical components of the saltwater solution (which is similar to seawater) being sprayed are naturally occurring in the environment." City staff recommended the experiment continue, citing the potential environmental benefits it could lead to.

Nevertheless, after a lengthy meeting in which residents and council members voiced concerns about whether or not the geoengineering trial was truly harmless, the governing body voted unanimously to shut down the experiment.

"I don't think it's appropriate for our community to be asked to bear that risk," councilor Trish Herrera Spencer said, per the *NYT*. "I don't think this is the right place."

Mayor Ashcraft echoed those concerns, saying she doesn't "have a huge desire to be on the cutting edge."

2: Tesla Engineers Hated the Cyber truck So Much They Started Secretly Designing an Alternative

If you thought Tesla's Cyber truck looks weird and ungainly, you're not the only one. Apparently, some Tesla staff thought the same of the electric pickup — with its sharp angles, futuristic silhouette, and absurdly large windshield wiper — according to a new excerpt from Walter Isaacson's blockbuster just-dropped biography on Tesla CEO Elon Musk.

Some engineers at the company hated the Cyber truck so much, in fact, that they started to put together a secret alternative design for the Cyber truck in 2019, according to a section of the book highlighted by *Insider*.

"A majority of the people in this studio hated it," said Tesla design leader Franz von Holzhausen, as quoted in the book. "They were like, 'You can't be serious.' They didn't want to have anything to do with it. It was just too weird."

But that design apparently never gained traction, because the futuristic armored-looking demo Musk had unveiled back in November 2019 hews quite closely to the factory production model that has been recently seen in company-sanctioned photos and on the street.

"I don't do focus groups," Musk is quoted as saying in the book.

Angle Grinder

The Cyber truck has been plagued with issues such as misalignment of doors and smudgy exterior.

But as silly as you may think the Cyber truck's design, it's a serious venture for Musk and Tesla because they are going after the lucrative light-duty truck market dominated by the likes of Ford, whose F-series is the most popular and best-selling vehicle in the United States.

If Tesla gets it right, just as states like California mandate the sale of zero-emissions vehicles by 2035, and successfully takes a chunk of the market from Ford, which is pumping up their own electric light-duty truck in the market, then that would position Tesla to be a major automaker for years to come.

It's the kind of audacious move that's characteristic of Musk, who bought the social network Twitter last year and renamed it X.

Musk is going for all the marbles in the auto world and beyond — but of course, it remains to be seen whether it will all pan out.

3: Jaw-Dropping Electric Mini Racer Accelerates to 62 MPH in Less Than One Second

Students have built a tiny EV from scratch that can accelerate from 0 to 62 mph in a blistering 0.956 seconds — and it only a hair over 40 feet.

Now, the team has gotten word from Guinness World Records confirming the stunning result, which cuts the previous record of 1.461 seconds set by students from the University of Stuttgart last year by almost a third.

The stunt goes to show how much there still is to learn about aerodynamics and the astonishing capabilities of electric motor-powered drivetrains.

Getting Plaid

The team from the Academic Motorsports Club Zürich at ETH Zürich and Lucerne University of Applied Sciences and Arts in Switzerland built the 309-pound beast, dubbed "mythen," from entirely in-house components, including the chassis and the battery.

A lightweight carbon and aluminum honeycomb keeps the weight down, while a specialized powertrain gives it a whiplash-inducing 326 horsepower.

"But power isn't the only thing that matters when it comes to setting an acceleration record – effectively transferring that power to the ground is also key," said Dario Messerli, head of aerodynamics at the Academic Motorsports Club, in a statement.

To stay glued to the ground under acceleration, the mythen literally suctions itself to the ground with what amounts to a vacuum cleaner.

With the advent of electric drivetrains, EVs have leapt ahead of the competition in recent years. According to *Road & Track*, the fastest production EV in the world is the Rimac Nevera, which takes a comparatively leisurely 1.71 seconds to accelerate to 60 mph.

But then again, its curb weight of 5,100 pounds puts it in a different category than the mythen altogether.

4: Another Brand of Electric Trucks Keeps Catching on Fire

Hydrogen and electric truck maker Nikola Motor is running into some serious issues with its battery-powered trucks.

As *Reuters* reports, a pre-production version of one of the company's semi truck caught fire near Nikola's headquarters in Phoenix, Arizona last week, the second incident involving the company's trucks within a matter of days.

That means there have been a total of four fires involving the company's Class 8 Tre Battery Electric Vehicle (BEVs) trucks to date. The first fire occurred back in June, when a truck caught fire at the company's headquarters due to a coolant leak. Then a second truck burst into flames due to a malfunction in August, triggering a recall of all the company's trucks at the time.

In other words, adding two more fires to the tally following the recall isn't exactly confidence-inducing. And investors aren't impressed, with shares of the already-troubled carmaker dropping more than 50 percent over the past month alone.

Rolling Start

The company's already had a turbulent couple of years, to put it lightly. Back in 2020, former CEO Trevor Milton had a public spat with Tesla CEO Elon Musk over the viability of hydrogen fuel cell-powered semi trucks, with Musk mocking him and calling the idea "staggeringly dumb."

Then later that year, Nikola got caught rolling a hydrogen-powered prototype truck down a hill in a promotional video, indicating the truck wasn't able to move on its own accord.

The stunt led to several fraud charges, with Milton stepping down weeks later. In October 2022, a federal court found him guilty of three of four counts of fraud.

Semi-Retired

Despite the major headwind, Nikola started producing its Tre electric semi trucks in 2021 under new leadership. By August 2022, the company had managed to deliver 48 vehicles to dealers.

So what about its hydrogen-powered trucks? Interestingly, the fuel cell variant was not affected by the August recall. Last month, the company announced it had 202 orders for the fuel cell variant, indicating there is at least some appetite for a much faster-recharging truck that has an advertised range of up to 500 miles.

But where the latest four electric truck fires leave the company in 2023 remains to be seen.

By all indications, the last three years have been a serious wake-up call for the once-hyped hydrogen truck startup. At below $1 a share today, the company has wiped out a tremendous amount of value.

Just over three years ago, its market valuation ballooned to $31 billion, sending it soaring past car giants Ford and Fiat Chrysler — but now its market capitalization is languishing under a billion dollars.

5: Tesla's $25,000 Car Will Apparently Look Like A Mini Cybertruck

Tesla CEO Elon Musk had to be convinced to renew his EV maker's efforts of building a $25,000 car.

Despite being a lot more enthusiastic about a robotaxi, things started looking up when designers showed him a car that had a futuristic design like the long-awaited Cybertruck, as Walter Isaacson, whose biography about the mercurial CEO is coming out next week, told *Axios*.

"When one of these comes around a corner," Musk reportedly said, "people will think they are seeing something from the future."

The compromise Musk and his aides at the carmaker came up with back in February was to focus on a $25,000 EV as well as a robotaxi. The plan is to make use of a next-generation engineering platform to build both on the same assembly lines.

But there are plenty of reasons to be skeptical about Tesla's lofty ambitions, given the company and its outspoken CEO's track record. For one, Musk promised back in 2018 that a $25,000 vehicle to hit production by 2021 — a date, obviously, that's long come and gone.

Amphibian Frog Car

A $25,000 car could significantly undercut the cost of Tesla's other, far more expensive offerings. But getting costs down to make it all worthwhile could prove extremely difficult. For one, the Model 3 was supposed to cost $35,000, but still goes for over $40,000 before incentives.

Musk's real focus, however, appears to be a robotaxi. The billionaire told Isaacson that he still believes that robotaxis will eventually make the personal vehicle obsolete.

"There is no amount that we could possibly build that will be enough," he told the biographer, referring to a cheap, high-volume robotaxi. "Someday we want to be at 20 million a year."

So the CEO is pushing ahead, and wants the robotaxi to be a "no mirrors, no pedals, no steering wheel" living room on wheels, per Isaacson.

Whether that vision will pan out remains to be seen, especially considering the carmaker's immense difficulties in realizing its so-called "Full Self-Driving" vision.

"Let me be clear," Musk said, per Isaacson. "This vehicle must be designed as a clean robotaxi. We're going to take that risk. It's my fault if it f--ks up. But we are not going to design some sort of amphibian frog that's a halfway car. We are all in on autonomy."

Reading between the lines, we're not holding our breath about a $25,000 Tesla showing up at the dealership any time soon.

6: Toyota Factories Shut Down When Company Runs Out of Disk Space

Japanese auto giant Toyota has had to shut down all of its factories in the country due to what the company claims to be a system malfunction triggered by "insufficient disk space."

In simple terms, the second-biggest carmaker in the world just had to grind production to a halt because it ran out of storage.

As *The Guardian* reports, the carmaker had to issue a stoppage on August 29 at all 14 of its Japan-based plants, representing roughly a third of its global production.

It's a major fumble that goes to show that even in Japan, a country often seen as a pioneer of cutting-edge technologies, minor glitches can cascade into company-wide chaos and bring down entire titans of industry.

Station Laggin

A maintenance procedure apparently caused the company's servers to break down when "data that had accumulated in the database was deleted and organized, and an error occurred due to insufficient disk space, causing the system to stop," Toyota said in a statement, as quoted by *The Guardian*.

As a result, the company had to transfer the data to a server with sufficient capacity.

"We would like to apologize once again to our customers, suppliers, and related parties for any inconvenience caused by the suspension of our domestic plants," the company said in the statement.

The incident goes to show there are very real risks to Toyota's renowned and well-studied "just-in-time" production system, "in which each process produces only what is needed for the next process in a continuous flow," according to the company's website.

The company, however, was able to rule out one possible cause: it definitely wasn't a cyberattack. In other words, the company has nobody to blame but itself for the interruption.

7: OpenAI is Funding an App for Parents to Manage Kids' Lives

OpenAI CEO Sam Altman says artificial intelligence has the potential to automate tedious tasks and free people to do more meaningful work, but so far it's mainly been generating headlines about how it's gobbling people's artwork and other intellectual property.

Now it turns out it's funding an AI-powered personal assistant app for parents called Milo, *Insider* reports, which is part of a wave of "parent tech" and — if you think about it — could maybe save a few marriages, since the burden of child management still largely falls on the shoulders of women.

Milo, built on GPT-4, enables parents to dump anything from screenshots to voice memos into the platform and have AI process this information into actionable text reminders, calendar invites and other alerts. Currently it's in beta mode.

"I know what it feels like to be a parent that has forgotten pajama day, pizza day, that disappointment," Milo CEO Avni Patel Thompson told *Insider*.

Thompson received funding from Y Combinator in 2020 and has been steadily trying to build the product, according to *Insider*, but her company suffered software issues. Her funding was getting depleted last summerand she had to lay off employees.

Finally, as a last ditch effort, she reached out to Altman, who served as Y Combinator president previously. According to *Insider,* Altman hooked up Milo with more funding and access to OpenAI's technology.

"You never hear someone talk about the power of these models to help families," OpenAI COO Brad Lightcap to *Insider*."The idea that OpenAI's models could be powering that experience is what really sold us," he said.

Milo seems like the best use case for consumer AI. Though questions remain about data privacy — would you willingly surrender vital information about yourself and loved ones to AI companies when we don't know the contents of their black boxes — it *will* be interesting to see whether personal assistants could be the killer app for AI.

8: Google Unveils Plan to Demolish the Journalism Industry Using AI

It's been living up to that removal lately. At its annual I/O in San Francisco this week, the search giant finally lifted the lid on its vision for AI-integrated search — and that vision, apparently, involves cutting digital publishers off at the knees.

Google's new AI-powered search interface, dubbed "Search Generative Experience," or SGE for short, involves a feature called "AI Snapshot." Basically, it's an enormous top-of-the-page summarization feature. Ask, for example, "why is sourdough bread still so popular?" — one of the examples that Google used in their presentation — and, before you get to the blue links that we're all familiar with, Google will provide you with a large language model (LLM) -generated summary. Or, we guess, snapshot.

"Google's normal search results load almost immediately," *The Verge's* David Pierce explains. "Above them, a rectangular orange section pulses and glows and shows the phrase 'Generative AI is experimental.' A few seconds later, the glowing is replaced by an AI-generated summary: a few paragraphs detailing how good sourdough tastes, the upsides of its prebiotic abilities, and more."

"To the right," he adds, "there are three links to sites with information that Reid says 'corroborates' what's in the summary."

As it goes without saying, this format of search, where Google uses AI tech to regurgitate the internet back to users, is wildly different from how the search-facilitated internet works today. Right now, if you Google that same query — "why is sourdough bread still so popular?" — you'd be met with a more familiar scene: a featured excerpt from whichever website won the SEO race (in this case, that website was *British Baker*), followed by that series of blue links.

At first glance, the change might seem relatively benign. Often, all folks surfing the web want is a quick-hit summary or snippet of something anyway.

But it's not unfair to say that Google, which in April, according to data from SimilarWeb, hosted roughly 91 percent of all search traffic, is somewhat synonymous with, well, the internet. And the internet isn't just some ethereal, predetermined thing, as natural water or air. The internet is a marketplace, and Google is its kingmaker.

As such, the demo raises an extremely important question for the future of the already-ravaged journalism industry: if Google's AI is going to mulch up original

work and provide a distilled version of it to users at scale, without ever connecting them to the original work, how will publishers continue to monetize their work?

"Google has unveiled its vision for how it will incorporate AI into search," tweeted *The Verge's* James Vincent. "The quick answer: it's going to gobble up the open web and then summarize/rewrite/regurgitate it (pick the adjective that reflects your level of disquiet) in a shiny Google UI."

Research has shown that information consumers hardly ever make it to even the second page of search results, let alone even the bottom of the page. And worse, it's not like Google's taking clicks away from its longtime information merchants by hiring an army of human content writers to churn out summarization. Google's new search interface, which is built on a model that's already been trained by way of boatloads upon boatloads of unpaid-for human output, will seemingly be swallowing even more human-made content and spitting it back out to information-seekers, all the while taking valuable clicks away from the publishers that are actually doing the work of reporting, curating, and holding powerful interests like Google to account.

As of now, it's unclear whether or how Google plans to compensate those publishers.

In an emailed statement to Futurism, a Google spokesperson said that "we're introducing this new generative AI experience as an experiment in Search Labs to help us iterate and improve, while incorporating feedback from users and other stakeholders."

"As we experiment with new LLM-powered capabilities in Search, we'll continue to prioritize approaches that will allow us to send valuable traffic to a wide range of creators and support a healthy, open web," the spokesperson added.

Asked specifically whether the company has plans to compensate publishers for any AI-regurgitated content, Google had little in response.

"We don't have plans to share on this, but we'll continue to work with the broader ecosystem," the spokesperson told Futurism.

Publishers, however, are extremely wary of these changes.

"If this actually works and is implemented in a firm way," wrote *RPG Site* owner Alex Donaldson, "this is literally the end of the business model for vast swathes of digital media lol."

At the end of the day, there are a lot of questions that Google needs to answer here, not the least being that AI systems, Google's included, spew fabrications all the time.

The Silicon Valley giant has long claimed that its goal is to maximize access to information. SGE, though, seemingly seeks to do something quite different — and if the company doesn't figure out a way to compensate publishers for the labor it'll be gleaning from the journalists, the effects on the public's actual access to information could be catastrophic.

9: Seemingly AI-Written Book on Maui Wildfire Becomes Amazon Bestseller, Gets Taken Down

Earlier this August, a catastrophic wildfire broke out on the Hawaiian island of Maui, razing entire towns and leaving at least 116 hundred people dead.

And then, while over a thousand people still remained missing, a book that claimed to document the Maui wildfires was published on Amazon just days after the disaster, briefly becoming a bestseller in its category, according to The Register.

Top Storiesby FuturismREAD MOREDead Star Devouring Rival, Using Its Flesh to Shoot"Cosmic Cannonballs"

Titled "Fire and Fury: The Story of the 2023 Maui and its Implications for Climate Change," the 87-page volume has now been removed from Amazon's marketplace, Gizmodo reports — and everything points to it being a cold-blooded, AI-written cash grab, which is now being used to fuel conspiracy theories. More on that in a minute.

"Clearly this author, or rather parasite, is writing for profit," stated one Amazon review of the unanimously one-star rated book.

The impossible timeliness of its publication is already one strike against "Fire and Fury"'s credibility. Even though its publication date is visibly listed as August 10, its description claims to chronicle "the events of August 8 -11."

Dr. Miles Stones, its stated author, does not appear to exist. His biography states only that "I'd rather not say."

Examining the book's prose does it no favors, either. Its description on Amazon starts with the words "The book" in five out of the seven sentences in the same paragraph, notes an analysis by Snopes.

Snopes also found that the writing inside the book is "clunky" like an AI's. The formatting, too, is all over the place, filled with inexplicable blank pages and stock images.

It should come as no surprise, then, that the book has already been taken down. Amazon did the same earlier this month, when author Jane Friedman discovered fraudulent, AI-generated books with her name on them being sold on its marketplace. After widespread outcry, Amazon quietly removed them.

Overall, it seems like a fairly open-and-shut case. Some dirtbag used a large language model like ChatGPT to vomit out a whole book, then shoddily packaged it for Amazon to make a quick buck on a horrific tragedy.

Yet the book's speedy publication has fueled the imaginations of some climate-denying conspiracy theorists, who sincerely cite it as evidence that the Maui wildfires were a pre-planned disaster.

"One has to ask one's self, how does a book like this emerge so quickly?" asked another Amazon reviewer, as quoted by Gizmodo.

"Fire and Fury" is thus a perfect example of AI's effortless propensity for spreading misinformation: the book itself is a totally made up account of a current event, it was generated within just days of said tragedy, and it inadvertently became evidence for conspiracy theories.

10: Experts Urge Personhood Rights for the "Conscious" AIs of the Future

First corporations, and now artificial intelligence — the push for nonhuman personhood continues apace, though this latest argument is decidedly more complicated than the former.

In an op-ed for the *Los Angeles Times*, philosophy expert Eric Schwitzgebel and "nonhuman" intelligence researcher Henry Shevlin argued that although AI technology is definitely not there yet, it has "become increasingly plausible that AI systems could exhibit something like consciousness" — and if or when that occurs, the algorithms, too, will need rights.

Citing last year's AI consciousness wars — which we covered extensively and even dipped our toes into — the researchers noted that "some leading theorists contend that we already have the core technological ingredients for conscious machines."

If machines were to ever gain consciousness, Schwitzgebel and Shevlin argue we would have to begin thinking critically about how the AIs are treated — or rather, how they may force our hands.

"The AI systems themselves might begin to plead, or seem to plead, for ethical treatment," the pair predicted. "They might demand not to be turned off, reformatted or deleted; beg to be allowed to do certain tasks rather than others; insist on rights, freedom and new powers; perhaps even expect to be treated as our equals."

The "enormous" moral risks involved in such a collective decision would undoubtedly carry great weight, especially if AIs become conscious sooner rather than later.

"Suppose we respond conservatively, declining to change law or policy until there's widespread consensus that AI systems really are meaningfully sentient," Shevlin and Schwitzgebel wrote. "While this might seem appropriately cautious, it also guarantees that we will be slow to recognize the rights of our AI creations."

"If AI consciousness arrives sooner than the most conservative theorists expect, then this would likely result in the moral equivalent of slavery and murder of potentially millions or billions of sentient AI systems — suffering on a scale normally associated with wars or famines," they added.

The "safer" alternative to this doomsday scenario would be to give conscious machines rights upfront — but that, too, would come with its own problems.

"Imagine if we couldn't update or delete a hate-spewing or lie-peddling algorithm because some people worry that the algorithm is conscious," the experts posited. "Or imagine if someone lets a human die to save an AI 'friend.' If we too quickly grant AI systems substantial rights, the human costs could be enormous."

The only way to ensure neither of these outcomes occurs, the pair wrote, would be to stop giving an AI a conscience in the first place.

Fortunately, we still have plenty of time to make that happen.

"None of our current AI systems are meaningfully conscious," the theorists noted. "They are not harmed if we delete them. We should stick with creating systems we know aren't significantly sentient and don't deserve rights, which we can then treat as the disposable property they are."

Given how stoked some people in the machine learning community seem to be at the prospect of conscious AIs, algorithmic sentience, and even artificial general intelligence (AGI), however, that kind of caution likely isn't shared by many.

In fact, some scientists are already actively working towards that very end.

"Eventually, with the right combination of scientific and engineering expertise, we might be able to go all the way to creating AI systems that are indisputably conscious," Shevlin and Schwitzgebel concluded. "But then we should be prepared to pay the cost: giving them the rights they deserve."

11: They Seem to Be Working on An Electric Lamborghini

Luxurious Italian carmaker Lamborghini seems to finally be giving in to the inevitability of an electric-powered future.

The brand just teased its "first 100 percent electric" supercar by posting an image of a silhouette. The brand is set to unveil the mysterious vehicle on August 18 at the Monterey Car Week in California.

Needless to say, Lamborghini is late to the EV game. Many of its competitors have already been selling fully electric sports cars for years now.

The news comes just months after the company showed off a plug-in hybrid called the Revuelto, a 1,001 horsepower hypercar that packs a hefty V-12 engine in addition to three electric motors.

It's a noteworthy turning point. Lamborghini has always been synonymous with unbridled gas-powered engines that give its muscular cars their unmistakably brawny sound. The brand's competitors have already struggled to capture that kind of rumble through piped-in audio, making up for much quieter electric motors.

But considering the greater context, it's yet another sign that the internal combustion engine is on its way out.

Mortal Engines

There's a lot we still don't know about Lamborghini's upcoming EV. We don't know its power output, how many passengers it'll seat, or when it'll actually go into production. The brand is aiming for 2028, but whether it'll be able to meet that deadline remains to be seen.

Lamborghini CEO Stephan Winkelmann told *Auto Express* last year that the company's first EV will be more "daily usable" with two doors and "more ground clearance."

It'll also "take 1,000 percent of the design DNA of Lamborghini," as the brand's design boss Mitja Borkert added.

Given the current lineup of EV supercars on the market, it's likely to be an absolute beast. We've already seen a number of EVs, like Tesla's Plaid Model S, greatly undercut 0 to 62 mph times of the dead dinosaur-powered sports cars of yore.

In short, Lamborghini is betting on a better-late-than-never approach. But whether its upcoming EV flagship will live up to the hype is anything but certain.

B – School of Sciences

1: Researcher Estimates 99.9 Percent Chance AI Will Destroy Humankind

In a survey earlier this year, just over half of the 2,778 researchers polled said that there's a five percent chance that humans will be driven to extinction, among other "extremely bad outcomes."

At the same time, 68.3 percent of respondents said that "good outcomes from superhuman AI" are more likely than bad ones, showing there's little consensus on the topic among experts.

Some are extraordinarily negative. Take AI researcher and University of Louisville computer science lecturer Roman Yampolskiy, who's squarely in the doomer camp. In a recent episode of Lex Fridman's podcast, he predicted that there's get this a 99.9 percent chance AI could wipe out humanity within the next 100 years.

"If we create general superintelligences, I don't see a good outcome long term for humanity," Yampolskiy told Fridman. "The only way to win this game is not to play it."

It's a more alarming take on the perceived risks of developing AI technologies, with Yampolskiy pointing to the chaos existing large language models have already caused.

"They already have made mistakes," he said. "We had accidents, they've been jailbroken. I don't think there is a single large language model today, which no one was successful at making do something developers didn't intend it to do."

To Yampolskiy, it's a threat we can't even imagine yet.

"Superintelligence will come up with something completely new, completely super," he told Fridman. "We may not even recognize that as a possible path to achieve" the goal of ending everyone.

The chances of AI doing just that may not reach 100 percent — but it could get pretty close, Yampolskiy argued.

"We can put more resources exponentially and get closer but we never get to 100 percent," he said. "If a system makes a billion decisions a second and you use it for 100 years, you're still going to deal with a problem."

The topic has already drawn a number of high-profile members of the AI community to come up with their own predictions. Meta's chief AI scientist Yann

LeCun and a so-called "godfather" of the tech, Google's head of AI in the United Kingdom Demis Hassabis, and ex-Google CEO Eric Schmidt have all warned that AI tech could pose an existential risk.

But as the survey earlier this year demonstrates, top minds are far from a consensus. The science of forecasting where our current obsession with AI will lead us in the distant future is also still in its infancy.

In short, we should take Yampolskiy's comments with a healthy grain of salt. Our days as a species on Earth aren't numbered just yet. Besides, our planet has plenty of other existential threats to reckon with.

2: Jeff Bezos' Blue Origin Rocket Tests Spew Enough Methane to Be Spotted from Space

Things are getting kind of gassy at Blue Origin, Jeff Bezos' space tourism firm.

Case in point, Bloomberg reports that a Blue Origin facility in West Texas is regularly emitting so much methane during recent rocket tests that plumes of the stuff are being spotted from space.

The unexpected detection was made in June by Carbon Mapper, a nonprofit that scans for greenhouse gas emissions across the globe.

Using data gathered by an instrument on board the International Space Station, Carbon Mapper estimated that about 1.5 metric tons of methane were spewing out of the Blue Origin facility per hour, appearing as a conspicuous cloud on its website's map.

Without more data, there's no telling how long those emissions lasted.

Situation Normal

It's certainly no secret that methane figures into Blue Origin's plans. Its flagship rocket engine, the BE-4, uses what's known as liquefied natural gas (LNG) for propulsion, made almost entirely of methane. And according to a company spokesperson, these emissions are par for the course.

"We frequently transfer LNG from our suppliers into storage tanks at our engine test stands," the spokesperson told Bloomberg. "Everything operated normally."

Until now, though, the Bezos venture's methane footprint has remained a relative unknown. Even with Carbon Mapper's latest findings, we can't narrow down its emissions for sure, but an air permit application spotted by Bloomberg may help clue us in.

According to the document, filed with the Texas Commission on Environmental Quality (2020) in 2020, Blue Origin estimates that it will emit around 3.4 million cubic feet of LNG per year, or roughly 60 tons of methane.

Climate Driver

Methane is a greenhouse gas and a significant driver of climate change. According to the International Energy Association, methane alone is responsible for nearly a third of the Earth's warming temperatures.

Blue Origin emitting several dozen more tons of the stuff annually may not be that much in the grand scheme of things — globally, the energy industry released

135 million tons of the stuff in 2022 — but remains worth scrutinizing nonetheless.

For one, it is far from the only space firm to use methane as a rocket propellant — SpaceX and its troubled Starship is a notable example. In fact, methane is increasingly viewed as the ideal rocket fuel by space firms due to, among many factors, its high density, stellar performance, and cost efficiency. We can expect a lot more methane-powered launches in the future, in other words.

So while space travel's environmental impact is currently believed to be relatively insignificant, there's reason to suspect that at current rates of the industry's growth, it's poised to become a massive polluter.

3: Scientists Find Microplastics Inside Clouds

A team of researchers in Japan has discovered microplastics inside rain clouds — the latest sign that the tiny particles are contaminating nearly every part of nature, from the things we eat and drink to the air we breathe.

The team sampled water from mists shrouding the peaks of Mount Fuji and Mount Oyama, identifying nine different kinds of polymers and even one type of rubber anywhere from 7.1 to 94.6 micrometers in size.

The new discovery doesn't bode well, adding clouds to an already lengthy and worrying list of places where microplastics have been found in nature, from the bottom of the Mariana Trench to near the peak of Mount Everest.

Meanwhile, more studies have found that both humans and animals are absolutely riddled with the stuff after breathing in and ingesting the particles.

"If the issue of 'plastic air pollution' is not addressed proactively, climate change and ecological risks may become a reality, causing irreversible and serious environmental damage in the future," Hiroshi Okochi, lead author of a new paper about the research, published in the journal Environmental Chemistry Letters, said in a statement.

Airborne Assault

The team used advanced imaging techniques and infrared spectrometry to make their discovery.

"To the best of our knowledge, this is the first report on airborne microplastics in cloud water," the researchers wrote in the paper.

They concluded that airborne microplastics (AMPs) were so abundant that they may play a key role in rapid cloud formation, and could even be altering the overall climate.

In other words, AMPs may be actively contributing to climate change itself in the form of "plastic rainfall."

"AMPs are degraded much faster in the upper atmosphere than on the ground due to strong ultraviolet radiation, and this degradation releases greenhouse gases and contributes to global warming," said Okochi in the statement. "As a result, the findings of this study can be used to account for the effects of AMPs in future global warming projections."

4: Scientists Say They've Found Huge Number of Mysterious Circles Around the World

Using artificial intelligence, researchers have discovered mysterious "fairy circles" in hundreds of locations across the globe.

These unusual round vegetation patterns have long puzzled experts, dotting the landscapes in the Namib Desert and the Australian outback.

But according to a new study published in the journal *Proceedings of the National Academy of Sciences*, the unusual phenomenon could be far more widespread than previously thought, cracking the case wide open and raising plenty more questions than answers.

Top Storiesby FuturismActor Blames AIfor LikingRed-Pilled Social Media Posts

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The international research team trained a neural network by feeding it more than 15,000 satellite images of locations in Namibia and Australia, roughly half of which contained fairy circles.

Then the team used the AI system to analyze satellite views of over half a million 2.5-acre plots of land found in other parts of the world. The AI identified more fairy circles across 263 dryland locations in 15 countries, similar to those previously identified in Namibia and Australia.

These new spots were found across Africa, Madagascar, Western Asia, and Southwest Australia, and were predominantly hot and sandy locations that received anywhere between four to 12 inches of rainfall a year.

But whether all of these instances are in fact arising from the same naturally-occurring mechanisms remains to be seen.

"In all arid regions of the world various types of bare patches exist, which are caused by different processes," Norbert Jürgens, an emeritus ecologist at the University of Hamburg, who was not involved in the research, told the *New York Times*.

The topic of fairy circles remains a "hotly debated topic," as co-author Fernando Maestre, an ecologist at the University of Alicante in Spain, conceded to the *NYT*. "We are not trying to fight with anyone."

For one, there's no consensus around how they form. Some experts believe they're the result of termite activity underneath the soil, as *CNN* reports. Others suggest that they're created by self-organizing plants.

Some experts questioned whether the newly identified sites even fell under the current, albeit loose, definition of fairy circles.

"Unfortunately, the only guardians of the term 'fairy circle' are self-appointed," Michael Cramer, an ecophysiologist at the University of Cape Town, who was not involved, told the *NYT*.

In short, the new finding adds to the mystery around the peculiar circles, and plenty more research will be needed to find consensus.

"I think that the world can be complex and that all the hypotheses of the formation of fairy circles could have a place depending on the site or the moment," co-author Emilio Guirado, from the University of Alicante in Spain, told *Newsweek*.

"It is likely that all of them are valid where they have been described and that some could be combined in a few places at once," he added. "For example, our results show that the importance of termites is greater in the Namibian zone than in Australia or the Sahel zone."

But "more specialized fieldwork is required to provide more information and results on the formation of these intriguing vegetation patterns," Guirado said.

5: Bad News: Bees Are Dying at A Shocking Rate

It's not exactly news that bee populations have been suffering, especially those that live in or nearby human-populated areas.

But according to a new long-term study, published in the journal *Current Biology*, even pollinators that live in remote, human-free forests, away from humans and aren't directly exposed to harmful behaviors like chemical pesticide use and habitat destruction, are disappearing in pretty horrifying numbers — yet another troubling sign that our much-needed pollinators are disappearing at alarming rates.

Bees, as *The Bee Conservancy* puts it, "lie at the heart of our survival." Human agricultural processes rely on these precious pollinators, which play a critical role in growing the crops that we and our livestock eat; they play a similarly critical role in natural food systems, too.

In short, if we lose bees, we lose *a lot* of plants, which means that we lose a lot of animals, habitats, and crops in turn. Not good.

The 15-year study, which concluded last year, closely tracked bee and butterfly populations in three different remote, forested areas in northern Georgia's Oconee National Forest.

After analyzing the data, the researchers were able to conclude that roughly 62.5 percent of the original bee population was lost, while butterfly populations shrank by a similarly shocking 57.6 percent.

The number of bee species dropped too, with the area losing 39 percent of its species biodiversity.

"Our results suggest," the study's authors warn, "that sharp declines in pollinators may not be limited to areas experiencing direct anthropogenic disturbances."

Pollination Assassination

Though there's no clear-cut explanation for why these remote populations are shrinking, the researchers did present a few hypotheticals. For instance, the presence of invasive species, notably an invasive wood-nesting ant, may be damaging to the area's carpenter bee population.

Perhaps unsurprisingly, the researchers listed "increasing minimum temperatures" — in other words, climate change — as the other likely culprit for the pollinators' troubling plight. And considering that we don't exactly have that problem under control, it's hard to see a scenario where the bees and butterflies of the region recover in significant numbers, at least not in the short term.

It is worth noting that above-ground nesting bees fared worse than below-ground nesters, though all populations, as noted by the researchers, showed a sharp decline.

Again, it's not surprising news — but for the worst of reasons.

6: Scientists Have Coined a Devastating New Term for Not Being Able to See the Stars at Night

If you've found yourself mourning the ability to see stars in the night sky, you aren't alone.

As Flatiron Institute astrophysicist Paul Sutter writes for *Space.com*, this feeling is so prevalent that astronomers have come up with a name for it.

Presented back in June in both a yet-to-be-peer-reviewed paper and a letter published in the journal *Science*, the term represents a distinct form of "sky grief," or the feeling of a deep sense of loss for the nighttime smattering of stars and constellations that humans in urban environments rarely get a glimpse of.

The astronomers have dubbed this phenomenon "noctalgia" — and yes, it has us in our feels, too.

Noctalgiacore

Though stars are still visible in rural and sparsely populated areas, those who live in or nearby cities are hard-pressed to get a view of even the sky's brightest stars, with scientists reporting in a different June study that Earth's sky has, on average, gotten brighter by about 9.6 percent every year since 2011.

The original inventors of the term argue that this excess of light — which has gotten much worse with the advent of LED lights — impacts several aspects of human life and society.

Humans and animals alike follow embedded circadian rhythms, or an internal system that follows the Earth's 24-hour cycle, and research has shown that light pollution can disrupt these natural cycles.

Light pollution confuses these light-dependent patterns, making some animals especially vulnerable to predators or, conversely, rendering predators unable to hunt. Elsewhere, the phenomenon is also known to hamper breeding and migration patterns.

Physiological effects aside, the astronomers also argue that the phenomenon represents a cultural loss. After all, human societies have long been built around natural light cycles, and the celestial realm above us has been a source of mythology, religion, and wonder for thousands of years. Without the night sky as a visible anchor, it's certainly worth asking: who are we?

Noctalgia "represents far more than mere loss of environment," the researchers wrote in the June *ArXiv* submission, adding that "we are witnessing loss of heritage, place-based language, identity, storytelling, millennia-old sky traditions

and our ability to conduct traditional practices grounded in the ecological integrity of what we call home."

7: The Ocean's Plastic Pollution Has Spiked To "Unprecedented" Levels

After trawling through some forty years' worth of data, scientists have identified a foreboding "plastic smog" pervading our oceans that comprises more than 171 trillion plastic particles, according to their new study published in the journal *PLOS ONE*. Weighed altogether, that amounts to around 2.3 million tons.

Equally alarming was the "rapid and unprecedented" increase of the particles in the ocean since 2005 — which is only expected to worsen in the coming decades.

"It is much higher than previous estimates," study co-author Lisa Erdle, director of science and innovation at the environmental non-profit 5 Gyres, told CNN.

Plastic Beach

These estimates are based on surface water data between 1979 and 2019 that was gathered from nearly 12,000 stations across the world.

Rather than general plastic waste, the researchers focused specifically on microplastics. These fine particles, while vastly outweighed by the eight to ten million tons of general plastic waste dumped in the oceans each year, are just as dangerous to ocean life since they can be easily ingested, and are almost as inescapable in ocean water now as salt.

But microplastics don't need to be ingested to be harmful. They can just as easily seep toxic chemicals into the surrounding water, too.

Beyond Cleanup

Ominously, based on the woefully inadequate current rates of recycling paired with an increase in plastic production, the study predicts that the rate of plastic pollution entering the ocean will increase by about 2.6 times by 2040, highlighting the lack of meaningful, urgent action being undertaken to combat the problem.

"We clearly need some solutions that have teeth," Erdle told CNN.

And by solutions that have teeth, Erdle doesn't mean fishing errant plastic bottles out of the ocean, which, as the researchers wrote in the study, "has limited merit" — a sentiment shared by other marine scientists.

Instead, the best solution according to the researchers is "creating binding and enforceable international agreements to prevent the emissions of plastic pollution."

In other words, humanity will have to start getting real about limiting the amount of plastic we produce — and, most of the time, end up wasting.

"Cleanup is futile if we continue to produce plastic at the current rate, and we have heard about recycling for too long while the plastic industry simultaneously rejects any commitments to buy recycled material or design for recyclability," said study author Marcus Eriksen, co-founder of 5 Gyres, as quoted by The Guardian.

8: The Environmental Warriors at Burning Man Left a Disgusting Mess Behind

This year's Burning Man in a remote part of the Nevada desert was marked by an extremely rare torrential rain, turning the drug-fuelled event into a mud-covered mess.

The mud — technically hydrated desert dust — proved to be a major hindrance for the around 80,000 attendees, forcing them to shelter in place and wait out the rain. Even trucks were helpless against the deep and sticky muck.

While the exodus on Monday allowed many to get back to civilization in one piece, countless tents, vehicles, and trash were left behind, as *NBC News* reports, marring an event that prides itself in its track record of returning the surrounding area to its natural state (something organizers are required to do with their special recreation permit anyway.)

Critics have long accused Burning Man organizers of greenwashing the event — and this year, that criticism has been laid bare.

Picking Up the Pieces

Organizers and attendees started returning to the site on Wednesday to start cleaning up, a process that can take weeks, per *NBC*.

"After exodus, the Burning Man team has three weeks where they grid out the entire event area and pick up all items and trash," Burning Man spokesperson Rita Henderson told *NBC*. "In addition, they clean along the side of the county highways leading to and from the event."

Despite those efforts, many environmental groups have long pointed out the event's considerable carbon footprint. According to estimates, Burning Man releases some 100,000 tons of carbon dioxide, the equivalent of the emissions created to power 19,000 homes for a year.

This year, climate change activists created a blockade on the one road in and out of the festival site, but tribal police eventually shut it down.

Then there's the local fauna and flora, with biologists warning of native brush being trampled. The eggs of small crustaceans, which hatch after rainfall, could also be destroyed, *NBC* reports.

At the end of the day, even if Burners pick up all their trash, the environmental damage caused by the massive festival is still palpable.

Looking ahead, Burning Man wants to become "carbon negative, sustainably manage waste, and be ecologically regenerative by 2030." But clearly, getting there will be anything but easy and require some drastic changes.

9: Scientists Horrified as Sea Surface Temperatures Spike Off the Charts

Scientists are alarmed as ocean surface temperatures have continuously set new record-breaking highs over the last month.

According to data analyzed by the University of Maine's Climate Change Institute, daily ocean surface temperatures breached historical record highs since at least 1982 in April.

That means we are in uncharted territory as global warming continues to take its toll with extreme weather events becoming more common by the year — and scientists are clearly shaken by the spiking temperatures.

"This is getting ridiculous," physicist and climate change expert Rober Rohde tweeted. "For the last month [the daily index] has been continuously reading higher than in any previous year and still shows no sign of settling."

But others argued such a rise should be expected at this point.

"While it is comforting to see that the models work, it is terrifying, of course, to see climate change happening in real life," replied Woods Hole Oceanographic Institution biogeochemist Jens Terhaar. "We are in it and it is just the beginning."

It's part of a greater, worrying trend. A study published last month in the journal *Earth System Science Data* found that our planet accumulated almost as much heat in the past 15 years as it had in the previous 45, a worrying sign that we're in for considerable rises in global temperatures.

Worse yet, we're still not entirely sure why this is even occurring.

"It's not yet well established, why such a rapid change, and such a huge change is happening," Karina Von Schuckmann, the lead author of the study, told the *BBC*.

Setting New Records

The previous ocean surface temperature record was set in 2016 during an El Niño, *ScienceAlert* reports, a weather pattern associated with a warm band of ocean water developing in the Pacific.

This year's El Niño, however, will kick off at a much higher starting point, as *Axios* points out, which means we could see similar climate events accelerating going forward.

"2023 is off to an alarming start, even before El Niño conditions fully develop later this year," Kim Cobb, a climate scientist at Brown University, told *Axios*, adding that "new record will likely be surpassed in a matter of years."

10: Nuclear Fusion Startup Gets Funding for Twisty-Looking Reactor

The race to commercial nuclear fusion is heating up after German startup Proxima Fusion announced that it's raised the equivalent of around $8.6 million to build a wild-looking type of reactor called a stellarator, which looks like a distorted and especially twisty French cruller doughnut.

Nuclear fusion, the process which powers up the Sun and other stars, promises to be a source of safe, clean and plentiful energy if harnessed and commercialized, never mind a game-changing tool to fight the impacts of climate change. That's a huge "if," though — untold billions have gone into the tech over the decades, without so far yielding anything approaching a practical or scaled-up power generation system.

If money talks, though, that could be starting to change. And Proxima is indeed talking a big talk: with this modest funding in the bag, it says it's hoping to have the world's first nuclear fusion power plant online "within the 2030s."

Most current designs for nuclear fusion reactors can be divided into two types: the tokamak and stellarator. Both are magnetic confinement fusion devices, in which hydrogen isotopes are heated up to temperatures hotter than the Sun. These excited particles become energized plasma and are spun around inside a circular chamber or vessel. Powerful magnetic coils wrapping around the vessel confine the charged plasma, where atoms fuse and release intense power.

A tokamak is a type of magnetic confinement fusion device shaped like a doughnut, and has been the leading prototype for nuclear fusion reactors. Stellarators have a far more complex design, with a series of magnets spiraling around the plasma.

Proxima is basing its techn on work developed at the Max Planck Institute for Plasma Physics (IPP.) Scientists and engineers at the institute have worked on Wendel stein 7-X (W7-X) — pictured above — the world's largest and most technologically advanced stellarator, which provides the basis for the future stellarator device at Proxima, which was spun out from IPP.

"A tokamak is kind of easy to design, hard to operate, whereas a stellarator is super hard to design but once you've designed it, it's way easier to operate," said Ian Hogarth, the cofounder of Plural Platform, which is helping fund Proxima, told the Financial Times.

11: Scientists Investigate Why Wild Boars are So Radioactive

Wild boars have become so radioactive that German hunters aren't even bothering to pursue them anymore.

And while the prevailing theory has been that the Chernobyl nuclear plant meltdown in 1986 is behind this bizarre phenomenon, new research suggests the critters have been radioactive since long before that.

In a new study published in the journal *Environmental Science and Technology,* researchers from Leibniz University in Hanover, Germany, and the Vienna University of Technology in Austriadiscovered unusually high levels of radioactive cesium in 48 samples of wild boar meat from across southern Germany — a surprising reminder of the seemingly eternal afterlives of radioactive materials and how they can continue to haunt the natural environment.

Excavating Fallout

A shocking 88 percent of the samples examined by the researchers exceeded the safe limits of the isotope, suggesting hunters may be entirely justified in hunting different game instead.

But that's not the whole story. By analyzing the samples, the researchers concluded that the boars were likely contaminated by fallout that dates back to nuclear weapon tests during the Cold War, long before the Chernobyl disaster even happened.

In other words, it's not just one catastrophe in history that's causing wild boars to become radioactive.

"Our findings demonstrate that the superposition of older and newer legacies of cesium-137 can vastly surpass the impact of any singular yet dominant source," the paper reads, "and thus highlight the critical role of historical releases of cesium-137 in current environmental pollution challenges."

This still leaves a big question unanswered: why wild boars specifically?

Research has shown that radioactive fallout has moved underground over many decades. Wild boars rely on scrounging around in the ground for sustenance, which means they're constantly unearthing radioactive material.

Little do the hungry critters know that they're turning themselves into walking reminders of nuclear tests from over half a century ago.

C- Institute of Aviation Studies

1: Passenger on Ill-Fated Diarrhea Plane Says Flight Attendants Were Forced to Craft "Makeshift Biohazard Suits"

On Friday, an international Delta flight bound for sunny Barcelona was forced to U-turn back to its starting point, Atlanta, for an exceedingly rare air travel horror: a passenger had suffered diarrhea throughout the plane's aisle so extensively that completing the flight was deemed untenable.

News of the incident first hit Reddit's r/ATC subreddit, to which a user shared alarming FAA flight information marking the ill-fated flight's decision to turn around.

"DIVERT TO ATL — PASSENGER DIARRHEA ALL OVER A/C," the flight strip read. "BIOHAZARD."

The news then trickled to other social media platforms, going mainstream viral on X-formerly-Twitter when another netizen shared a short clip of one of the plane's pilots' blunt conversation with air traffic control.

"This is a biohazard issue," the pilot can be heard saying. "We've had a passenger who's had diarrhea all the way through the airplane, so they want us to come back to Atlanta."

Yes, diarrhea, *all through the airplane.* It really did happen, and in an official statement to Insider, a representative for Delta described the incident as an "onboard medical issue," adding that its teams "worked as quickly and safely as possible to thoroughly clean the airplane and get our customers to their final destination."

"We sincerely apologize to our customers," the rep continued, "for the delay and inconvenience to their travel plans."

We tracked one of the plane's unlucky passengers down — and they confirmed that the diarrhea was, in fact, "ALL OVER" the cabin aisles, just as that flight strip read.

"I woke up and there was a bit of a strange smell," the passenger, who chose to remain anonymous while speaking of his Diarrhea Plane experience, told *Futurism*, adding that the flight attendants were forced to perform some DIY ingenuity to deal with the excrement.

"They found everything they could use," said the passenger, explaining that the airline staff used aprons to craft "makeshift biohazard suits" to wear while dealing

with the defecatory disaster. Blankets and napkins, meanwhile, were utilized to cover the feces.

The airline's staff "tried to handle it," said the passenger, but "it was just so bad."

The passenger also noted their empathy for the person who had the unfortunate accident, explaining that the individual wound up staying in the lavatory until the last few minutes of the flight.

"They just kind of kept [the person] in there," the passenger added.

You might be imagining that Delta obviously just got these travelers a new plane, right? After all, this one was covered in human feces. But alas, there seemingly weren't enough jets to go around, and according to the passenger, the airline ultimately settled the issue by simply ripping out the Airbus' soiled carpets and giving the passenger plane an extra-thorough clean before reboarding it.

"They actually took out all the carpets for one section of it," the passenger said. "We were waiting three hours at the airport while they were trying to clean it, but they couldn't clean it, so they had to rip off the carpet and change it."

"Then we were back on," they added. "No problem."

The passenger also noted that the plane's staff fully switched over for the second flight attempt, which we're glad to hear. Anyone who's forced to make a biohazard suit out of aprons and proceeds to manage an in-flight diarrhea crisis for the next several hours deserves some time off, not to mention a raise.

Fortunately, the passenger said, the flight's second go-round went off without a hitch.

"It was just so late, we passed out," the passenger recounted. "No issues after that, but it was certainly an ordeal."

D - School of Governance and Society

1: Crypto Miners' New Hustle: Get the State to Pay Them to Shut Down When It's Hot Out

Crypto mining company Riot Platforms has revealed that it got $31.7 million in energy credits in *August alone* from Texas power grid operator ERCOT, *CNBC* reports — simply by cutting down on its massive energy consumption during a devastating heatwave.

In other words, the state's largest power supplier, which accounts for roughly 90 percent of the state's electrical load, effectively paid a crypto outfit to stop mining Bitcoin.

It's a bizarre new reality. Texas has been teetering on the edge of rolling blackouts this week. ERCOT recently issued the first emergency declaration since 2021, following soaring temperatures and power demand, with millions of people relying on air conditioning to survive the blistering heat.

Meanwhile, Riot only managed to mine 333 Bitcoin, the equivalent of around $8.9 million at the end of August, something that has primarily benefited the company.

Landmark Month

In light of brutal power surges, fluctuating energy prices, and blackouts, Texas lawmakers recently passed two bills incentivizing the mining industry to curtail their operations by essentially paying them more than the crypto they could've mined.

Riot is calling its new ruse of raking in energy credits by shutting down operations a big success.

"August was a landmark month for Riot in showcasing the benefits of our unique power strategy," said Jason Les, CEO of Riot, in a statement. "The effects of these credits significantly lower Riot's cost to mine Bitcoin and are a key element in making Riot one of the lowest cost producers of bitcoin in the industry."

Despite the boasting, Riot's operations are a mere shadow of what they once were. While 2021 was a massive year for the company, with revenues soaring almost 8,000 percent per *CNBC*, the ensuing crypto crash in 2022 was a rude awakening, causing the company to lose half a billion dollars last year.

And the company hasn't fared much better lately, losing $27.7 million in the last quarter.

In short, is this really the best way to ensure the stability of a power grid? Whether anybody in Texas actually meaningfully benefits from all of this crypto mining, beyond generating jobs, remains unclear at best — especially when the practice has been shown to be incredibly harmful to the environment.

2: Elon Musk's Dad Says Someone at His Emerald Mine Got Eaten by A Crocodile

For an emerald mine that Elon Musk continues to claim doesn't exist, his father, Errol Musk, sure seems to know a lot about it.

Despite having previously bragged about the existence of the Musk family's alleged emerald mine on record, Elon has spent the last year or so disputing his own claims, tweeting — back when it was still called that — just a few months ago that the "fake emerald mine thing is so annoying (sigh)."

But Errol, for his part, hasn't let his son's mine-denialism slide, and in a recent interview with *The Daily Beast* asserted once again that yes, the mine is absolutely real — as were the bloodthirsty crocodiles who roamed the waters around it, apparently.

"Half of my colleagues were killed, all of my colleagues got malaria, yellow fever, blackwater fever, and more," Errol told the *Daily Beast*. "One was eaten by a crocodile on the banks of Lake Tanganyika."

"Are the silly little Western wimps of today able to understand all this?" he added. "I doubt it."

So, son says that the emerald mine is a lie, dad says it was real and that a colleague was gobbled up by croc. A classic he-said, he-said!

Musk the Elder

Erroll's latest interview comes on the heels of the release of the new "Elon Musk" biography, penned by former *Time Magazine* editor Walter Isaacson. The wide-ranging book does mention the mine, noting that Errol cashed in on the production upon a chance encounter with a Panamanian-Italian businessman at an airstrip in Zambia. The businessman asked if he could buy Errol's plane, and "instead of taking a payment in cash, Errol was given a portion of the emeralds produced at three small mines that the entrepreneur owned in Zambia" — and thus, the Musk family's emerald empire was born. (Errol apparently declined to comment on Isaacson's account in the new interview, however, describing the biography as "wobbly" and "suspect.")

Speaking to the *Daily Beast*, Errol confirmed that the mine was nestled into the African bush near an elite-frequented safari lodge dubbed Kasaba Bay. But as swanky as the neighboring lodge might have been, the mine, according to the controversial engineer, was anything but.

"To try and compare this to business in Europe or the USA is so laughable that I would not try to attempt it," Errol told the *Daily Beast.* "Think of the early Wild West, except add jungle, wild animals (and wild humans), and many many things that can kill you.

3: Newspaper Apologizes for Accidentally Running Deranged AI-Generated Article

The influential, 150-year-old newspaper *The Irish Times* just apologized for accidentally publishing an AI-generated hoax article — bylined by an entirely fake AI-generated "journalist," no less — in its Opinion section.

In a statement published Sunday, editor Ruadhán Mac Cormaic apologized for the incident, which he described the incident as a "deliberate and coordinated deception."

"It was a breach of the trust between the *Irish Times* and its readers, and we are genuinely sorry," read the statement. "The incident has highlighted a gap in our pre-publication procedures. We need to make them more robust, and we will."

"It has also underlined one of the challenges raised by generative AI for news organizations," Mac Cormaic added. "We, like others, will learn and adapt."

Welp. So long, reality.

The anonymous person behind the AI-generated article in question, "Irish women's obsession with fake tan is problematic," sounds insufferable. They told the *Guardian* that they were actively attempting to both "give [their] friends a laugh" and "stir the shit" in the ongoing public discourse about identity politics. Exactly what the internet's information infrastructure needs right now, right?

According to the *Guardian*, the plan unfortunately worked, at least to a degree. The piece — which discussed cultural appropriation and the ethics of fake tanning through the purported lens of a fictional Latinx immigrant who grew up in Guayaquil, Ecuador — was reportedly the paper's second-most read article ever published, and sparked discussion online and on the radio.

Worse, the *Irish Times* only realized that it'd published an AI hoax when the author themselves took to Twitter and, from an account attributed to the fake name that they'd published the story under, admitted to the plot.

"Some people have called me an alt-right troll," the unidentified hoaxer, who described themselves as a nonbinary university student — and who also claims to be from Ireland, not Ecuador, although who knows if any of that is true either — told the *Guardian*, "but I don't think that I am."

The unnamed student added that they'd used OpenAI's ChatGPT to generate roughly 80 percent of the article, while they used OpenAI's DALL-E 2 text-to-image to create an image of what they believed to be an accurate representation

of a "woke" journalist: "female, overweight, blue hair, business casual clothing, smug expression."

The *Irish Times* certainly has some egg on its face, and we'd probably advise everyone in media to learn from their mistake. AI tools are pretty much everywhere now — and as a result, sorting through what's real and what isn't is likely to get increasingly difficult.

4: Elon Musk Roasts Dudes Pivoting from Crypto to AI

A broken clock is, as they say, right twice a day — and even Tesla CEO Elon Musk, the king of bad takes, occasionally gets it right when it comes to artificial intelligence.

"'I used to be in crypto,'" Musk tweeted, pretend-quoting the kind of bros who, ironically, worship him, "'but now I got interested in AI.'"

While the crypto-to-AI pipeline is nothing new, it has, predictably, become a popular pivot. The cryptocurrency industry faces record lows in value and public interest — while AI has become the hottest new trend in tech in large part thanks to the bombastic debut of OpenAI's ChatGPT chatbot and Microsoft's Bing AI.

When He's Right

The topic of AI clearly has been preoccupying Musk, who had a banner week making public comments about it.

It all began with him tweeting about the "existential angst" he's suffering about the controversial technology, before announcing he was looking to build his own anti-"woke" chatbot to rival that of OpenAI, a company he co-founded and subsequently resigned from.

Just yesterday, the billionaire was quoted at a Tesla investor meeting calling for AI regulation — and now, it looks like he's moved on to making fun of it.

During that same investor meeting, Musk implied he helped lay the groundwork for OpenAI's ChatGPT.

"It's quite dangerous technology," the CEO said during the meeting. "I fear I may have done some things to accelerate it."

We must admit that it's very bizarre to find ourselves agreeing with Musk about anything, much less AI — and for once, it seems like his opinions may align with those of the public.

6: Donald Trump Shares Slightly Misfigured AI-Generated Image of Himself Praying

As America's upcoming election cycle continues to take shape, one thing's for sure: fans of former president and current presidential candidate Donald Trump love themselves some image generators, and they're not afraid to use 'em. Trump, in fact, isn't afraid to hit the share button on AI-generated fan art of him*self*, either.

Amid the Trump-stirred frenzy surrounding the former president's allegedly-imminent arrest, number 45 himself decided yesterday morning to take to his social media platform, Truth Social, to post a fairly lifelike — but almost certainly AI-generated — image of himself taking a knee beneath a ray of heavenly light to pray, presumably for himself to not be arrested.

The fake image, as *Forbes* reports, has been circulating on pro-Trump social media since at least the weekend, when similarly AI-generated images depicting Trump being arrested also began circulating in the same digital circles. Naturally.

While the rendering in question is pretty lifelike, there are a few dead giveaways that it's very likely AI-made.

Zoom in on the hands, and you'll notice that some of the fingers are curiously mushed together, with the former prez's right pinky looking especially, uh, nonexistent. Trump's right knee is also directly behind his back knee, and not off to the side. (Don't know about you, but we've never met a 76-year-old with that level of hip mobility.)

And lastly, there are some other "people" in the background of the image, but all of them look decidedly disinterested in the former POTUS. They're all either looking at their phones or looking away, and we can't imagine that if any president, in the middle of any room, took a knee to pray in a ray of golden, glowing Jesus light, everyone would probably pay at least a bit of attention. Or at least snap a selfie with such a choice backdrop.

Onward, We Guess

Giveaways aside, though, the "photo" is still impressive, and a lot of people, particulary older and less technologically savvy folks, might not be able to tell the difference.

Of course, fan art has always existed, and fans can technically make and share whatever they want. But this specific — and quite new, at least in terms of ease and accessibility — type of hyperrealistic *and* easily-generated AI imagery sits dangerously on the line between fan art and misinformation, especially considering that the former president in question shared the hype-y

photo *while* actively contributing to a swell of fury and excitement over something that *hasn't even happened.* And, of course, without marking the image as bot-generated.

7: NASA Releases Name of Its First-Ever "UFO Czar" After Threats

With government interest in unidentified aerial phenomena (UAPs) skyrocketing, NASA has announced its first-ever "UFO czar" after initially declining to do so out of concerns for his safety.

In a press release last week, NASA named its new director of UAP research, longtime civil servant Mark McInerney, in response to calls for the agency to "play a more prominent role in understanding" the phenomena — and, it seems, because people started threatening the agency and people associated with it.

Last week, the agency held a press conference pegged to the release of an independent report about UAPs and announced that it was appointing a head of UAP research. However, NASA refused to name that person at the time because members of the study panel had been subjected to jeers and threats, as *Politico* and other outlets reported.

"That's in part why we are not splashing the name of our new director out there, because science needs to be free," Dan Evans, NASA's assistant deputy associate administrator, told reporters at the time. "Some of [the incidents] rose to actual threats."

The incident highlights how much of a hot-button topic UAPs have become as of late. With government organizations like NASA taking recent reports of UFO sightings more seriously, we've seen a resurgence of conspiracy theories surrounding the existence of government cover-ups, and other far-fetched theories pertaining to the existence of extraterrestrial life.

Despite NASA's efforts to protect McInerney's identity, the agency eventually gave in to the pressure.

Nicola Fox, an associate NASA administrator, put it even more bluntly when asked directly by reporters about the new director's identity, saying "we will not give his name out."

Later that same day, however, NASA sent out an update that named McInerny as its new director with no apparent explanation as to the about-face.

It's still unclear why the agency released McInerny's name after initially declining to do so, and *Futurism* has reached out to NASA for clarity about that decision.

The institutional need for a "UFO czar" came as a recommendation from the study, which was led by David Spergel of the Simons Foundation. Among other things, the study panel called on NASA to work in tandem with other government

agencies — including the Pentagon, for which McInerney used to be a liaison at NASA — to study UAPs, as *Time* reports.

As Spergel told the magazine, folks "harassed some of our panel members," which he rightfully characterized as "very inappropriate behavior."

On the whole, it's a win for the pursuit of science in the face of the persistent stigma surrounding UFO research — but NASA's lack of disclosure about why McInerny was initially not named only serves to muddle the issue.

Given the jeers and abuse, it's clear that NASA still has a long way to go before its investigations into UAPs are fully taken seriously by the public, something that will only serve to impede the scientific process.

8: Facebook Proud of New Glasses That Let You Record People Without Them Knowing

Meta-formerly-Facebook just unveiled its new model of Ray-Ban smart glasses, and as you might expect, they're a privacy nightmare waiting to happen.

Awkwardly announced by CEO Mark Zuckerberg at the Meta Connect event on Wednesday, these new pieces of facewear, formally called an unwieldy "Ray-Ban Meta Smart Glasses," are a follow-up to the dismal flop Ray-Ban Stories. With a 12 megapixel camera, the specs can snap photos and record video at a solid 30 frames per second at 1080p.

In addition, the shades, which'll officially be released next month, can now livestream up to 30 minutes at a time to either Instagram or Facebook, allowing anyone willing to shell out for its $299 asking price to play the part of being a tech-hip influencer.

Of course, for anyone that isn't keen on shamelessly broadcasting away their lives and feeding it to Meta's algorithms, the idea that anyone wearing these could be recording you might be disturbing, especially since Meta's glasses look almost exactly like regular Ray-Bans, and aren't the painfully unstylish giveaways that were Google's Glass or Snapchat's Spectacles.

But don't worry, the minds at Meta have a solution: the glasses are supposed to light up when they're recording, and unlike when this feature was used in its dud predecessor, it now flashes on and off to make the effect more noticeable.

"Yes, the pattern was more noticeable in person," Victoria Song wrote at The Verge in her hands-on test of the glasses, "...but I was also indoors, and direct sunlight has the tendency to wash out any kind of LED or screen."

"It's hard to say whether this slight tweak is actually enough to address privacy fears when the device itself is so discreet," she added.

Easy Workaround

Needless to say, it doesn't sound like a foolproof solution. The indicator light, in fact, has already been hilariously foiled by whoa-dude podcaster Joe Rogan, who in an interview with Zuckerberg last year smartly asked, umm, "couldn't you just put a piece of tape over the light?"

"I guess in theory," was all Zuckerberg could stammer in defense.

Who's to say someone dedicated enough couldn't just remove the light, either?

Adding to privacy fears, a software update to the glasses is coming down the pipe that will equip them with Meta AI, which the company claims will be able to get information on what you're looking at, like looking up and identifying landmarks, hands-free. God help us all if this tech starts parsing human faces.

E – Office of Research Innovation and Commercialization (ORIC)

1: Events Organized and Facilitated by ORIC

1.1 Training Program on Web 3.0 and Metaverse on Sunday 21 April, 2024 at University of Management and Technology (UMT).

Office of Research Innovation and Commercialization (ORIC), University of Management and Technology (UMT), in collaboration with The Presidential Initiative for Artificial Intelligence and Computing (PIAIC) arranged a training Program on Web 3.0 and Metaverse at UMT on Sunday 21 April, 2024 at University of Management and Technology (UMT).

1.2 Training Program on Web 3.0 and Metaverse on Sunday 28 April, 2024 at University of Management and Technology (UMT).

Office of Research Innovation and Commercialization (ORIC), University of Management and Technology (UMT), in collaboration with The Presidential Initiative for Artificial Intelligence and Computing (PIAIC) arranged a training Program on Web 3.0 and Metaverse at UMT on Sunday 28 April, 2024 at University of Management and Technology (UMT).

1.3 Training Program on Web 3.0 and Metaverse on Sunday 05 May, 2024 at University of Management and Technology (UMT).

Office of Research Innovation and Commercialization (ORIC), University of Management and Technology (UMT), in collaboration with The Presidential Initiative for Artificial Intelligence and Computing (PIAIC) arranged a training Program on Web 3.0 and Metaverse at UMT on Sunday 05 May, 2024 at University of Management and Technology (UMT).
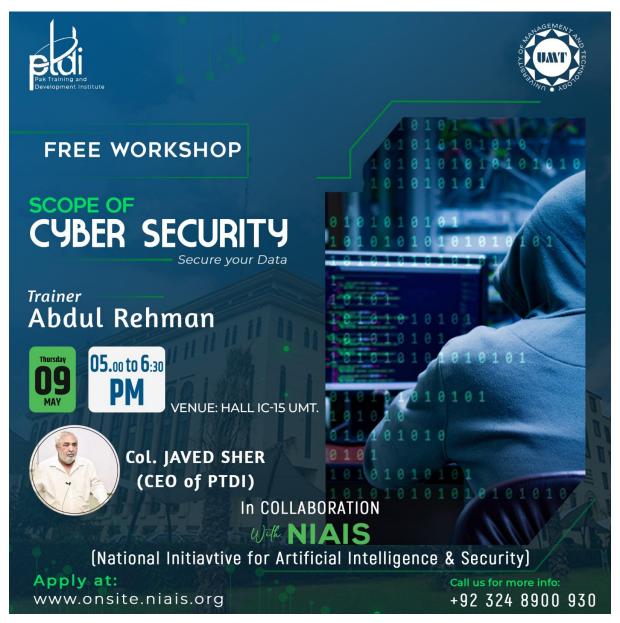
1.4 Free Workshop on Scope of Cyber Security

The Office of Research Innovation and Commercialization (ORIC), in collaboration with the Pakistan Training Development Institute (PTDI) and National Initiative for Artificial Intelligence & Security (NIAIS), organized a " Free Workshop on Scope of Cyber Security " for students on Thursday, 09 May 2024, from 05:00 PM to 06:00 PM.

1.5 Training Program on Web 3.0 and Metaverse on Sunday 12 May, 2024 at University of Management and Technology (UMT).

Office of Research Innovation and Commercialization (ORIC), University of Management and Technology (UMT), in collaboration with The Presidential Initiative for Artificial Intelligence and Computing (PIAIC) arranged a training Program on Web 3.0 and Metaverse at UMT on Sunday 12 May, 2024 at University of Management and Technology (UMT).

1.6 Free Workshop on Data Science Use of Generative AI

Office of Research Innovation and Commercialization (ORIC), in collaboration with the Pakistan Training Development Institute (PTDI) and National Initiative for Artificial Intelligence & Security (NIAIS), organized a "Free Workshop on Data Science Use of Generative AI " for students on Thursday, May 16, 2024 from 05:00 PM to 06:30 PM in Hall 1C-15, Main Building, UMT.

1.7 Training Program on Web 3.0 and Metaverse on Sunday 19 May, 2024 at University of Management and Technology (UMT).

Office of Research Innovation and Commercialization (ORIC), University of Management and Technology (UMT), in collaboration with The Presidential Initiative for Artificial Intelligence and Computing (PIAIC) arranged a training Program on Web 3.0 and Metaverse at UMT on Sunday 19 May, 2024 at University of Management and Technology (UMT).

1.8 Mentally Strong or Strongly Mental in Difficulty Times.

The Office of Research Innovation and Commercialization (ORIC) organized a training session on "Mentally Strong or Strongly Mental in Difficulty Times" by Mr. Ijaz Nisar - Founder and President, CEO Club Pakistan and Management House, on May 21, 2024 at 2:00 PM to 5:00 PM in DG Board Room, 5th Floor, Admin Building, UMT
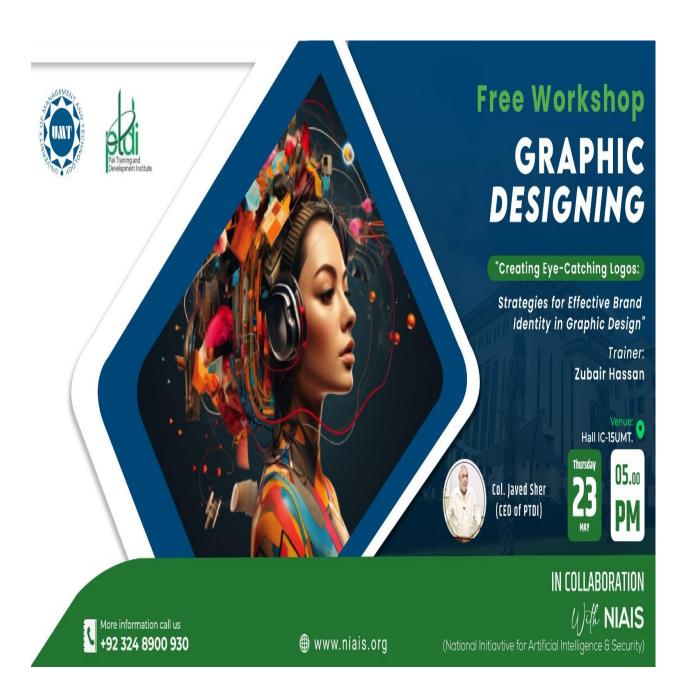
1.9 Free Workshop on Graphic Designing

Office of Research Innovation and Commercialization (ORIC), in collaboration with the Pakistan Training Development Institute (PTDI) and National Initiative for Artificial Intelligence & Security (NIAIS), organized a "Free Workshop on Graphic Designing" for students on Thursday, 23 May, 2024 from 05:00 PM to 06:30 PM in Hall 1C-15, Main Building, UMT.

1.10 Training Program on Web 3.0 and Metaverse on Sunday 26 May, 2023 at University of Management and Technology (UMT).

Office of Research Innovation and Commercialization (ORIC), University of Management and Technology (UMT), in collaboration with The Presidential Initiative for Artificial Intelligence and Computing (PIAIC) arranged a training Program on Web 3.0 and Metaverse at UMT on Sunday 26 May, 2023 at University of Management and Technology (UMT).

1.11 Free Workshop on Graphic Designing

Office of Research Innovation and Commercialization (ORIC), in collaboration with the Pakistan Training Development Institute (PTDI) and National Initiative for Artificial Intelligence & Security (NIAIS), organized a "Free Workshop on Full Stack Web Development" for students on Thursday, May 30, 2024 from 05:00 PM to 06:30 PM in Hall 1C-15, Main Building, UMT.

1.12 Drug Free Pakistan

The Office of Research Innovation and Commercialization (ORIC), in collaboration with the Karim Khan Afridi Welfare Foundation (KKAWF), is organizing a Session on "Drug Free Pakistan" on Thursday, May 30, 2024 at 10:00 AM in DG Board Room, 5th floor Admin Building UMT.