



## ARTIFICIAL INTELLIGENCE



### AI Index Report 2023 - Artificial Intelligence Index

The AI Index is an independent initiative at the Stanford Institute for Human-Centered Artificial Intelligence (HAI), led by the AI Index Steering Committee, an interdisciplinary group of experts from across academia and industry. The annual report tracks, collates, distills, and visualizes data...

[aiindex.stanford.edu](https://aiindex.stanford.edu)

### The Age of AI has begun

In my lifetime, I've seen two demonstrations of technology that struck me as revolutionary. The first time was in 1980, when I was introduced to a graphical user interface-the forerunner of every modern operating system, including Windows.

[gatesnotes.com](https://gatesnotes.com)



### The Age of AI and Our Human Future

The Age of Artificial Intelligence is transforming human society. Machines can now produce innovations and insights that have long eluded human thinkers. Not since the Age of Reason have we revolutionized our approach to economics, order, security, and even knowledge itself.

[youtube.com](https://youtube.com)

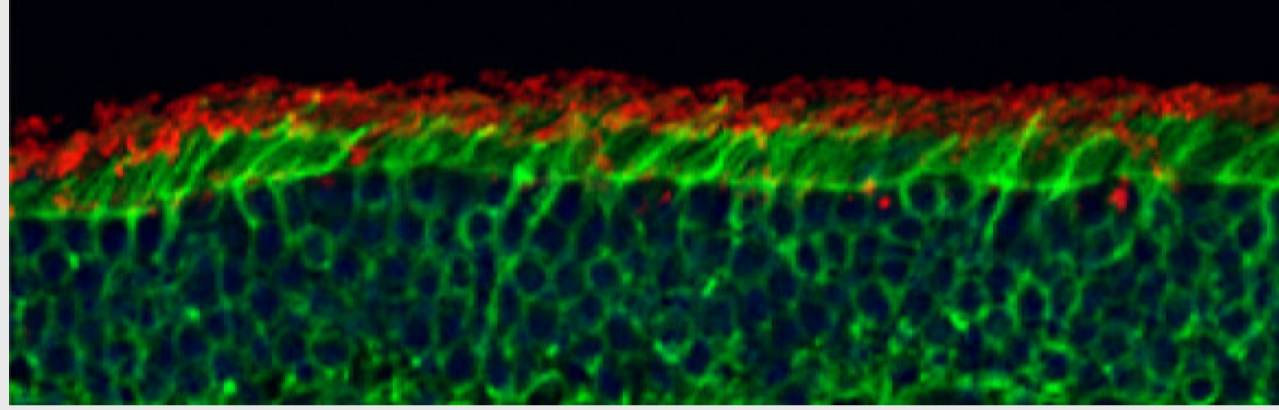
### Stable Diffusion copyright lawsuits could be a legal earthquake for AI

The AI software Stable Diffusion has a remarkable ability to turn text into images. When I asked the software to draw "Mickey Mouse in front of a McDonald's sign," for example, it generated the picture you see above. Stable Diffusion can do this because it was trained on hundreds of millions of...

[arstechnica.com](https://arstechnica.com)



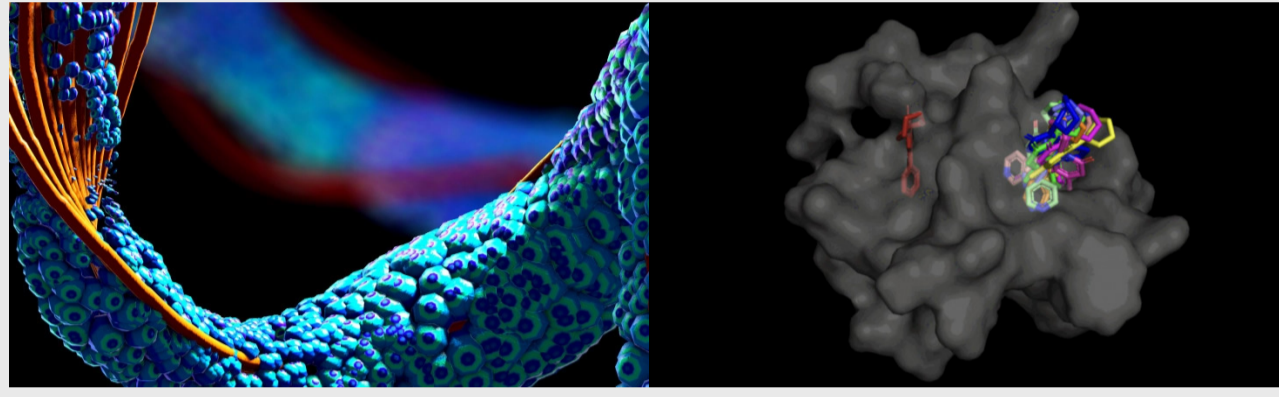
## LIFE SCIENCES



### Vision restored in mice thanks to refined CRISPR system

It's been about seven years since researchers used the CRISPR gene-editing system to reverse a blindness-inducing condition called retinitis pigmentosa in stem cells outside the body. Now, using a more refined version of CRISPR, a different research team has restored vision in a live animal...

[newatlas.com](https://newatlas.com)



### Study reveals the 3D structure of a protein involved in genome editing

Gene editing is one of the latest breakthroughs in biology. The widely known CRISPR-Cas gene editing system provided prokaryotes (organisms that lack cell nuclei) an immunity against foreign DNA. Since the discovery of the CRISPR gene editing technology, scientists are revealing the evolution of...

[phys.org](https://phys.org)

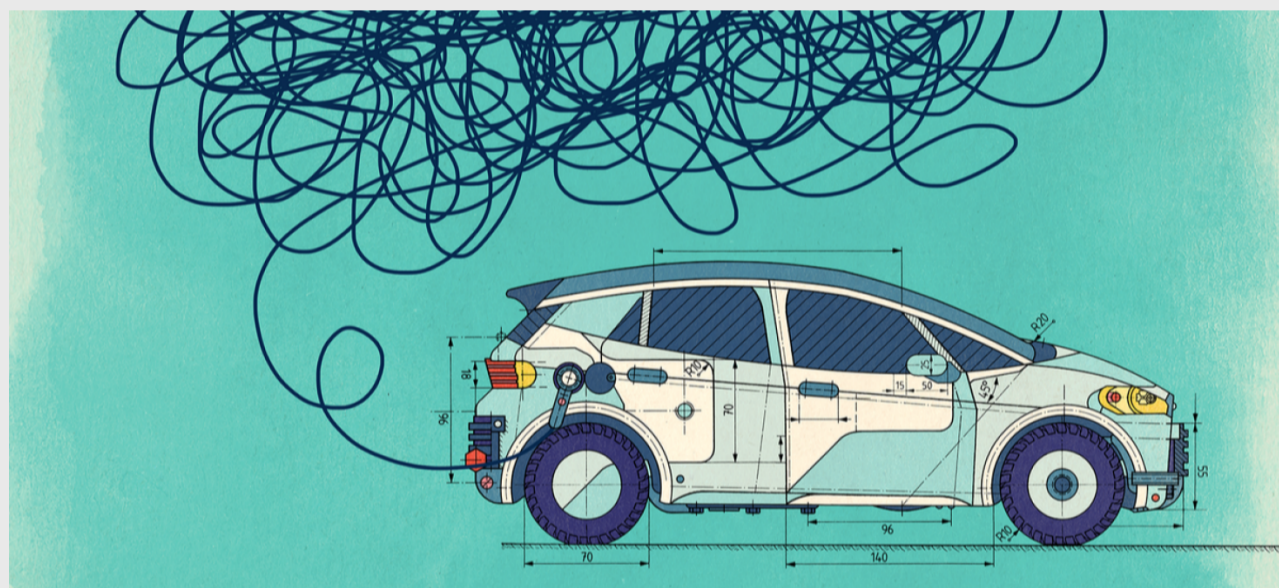
### Speeding up drug discovery with diffusion generative models

With the release of platforms like DALL-E 2 and Midjourney, diffusion generative models have achieved mainstream popularity, owing to their ability to generate a series of absurd, breathtaking, and often meme-worthy images from text prompts like "teddy bears working on new AI research on the moon..."

[news.mit.edu](https://news.mit.edu)



## ENERGY



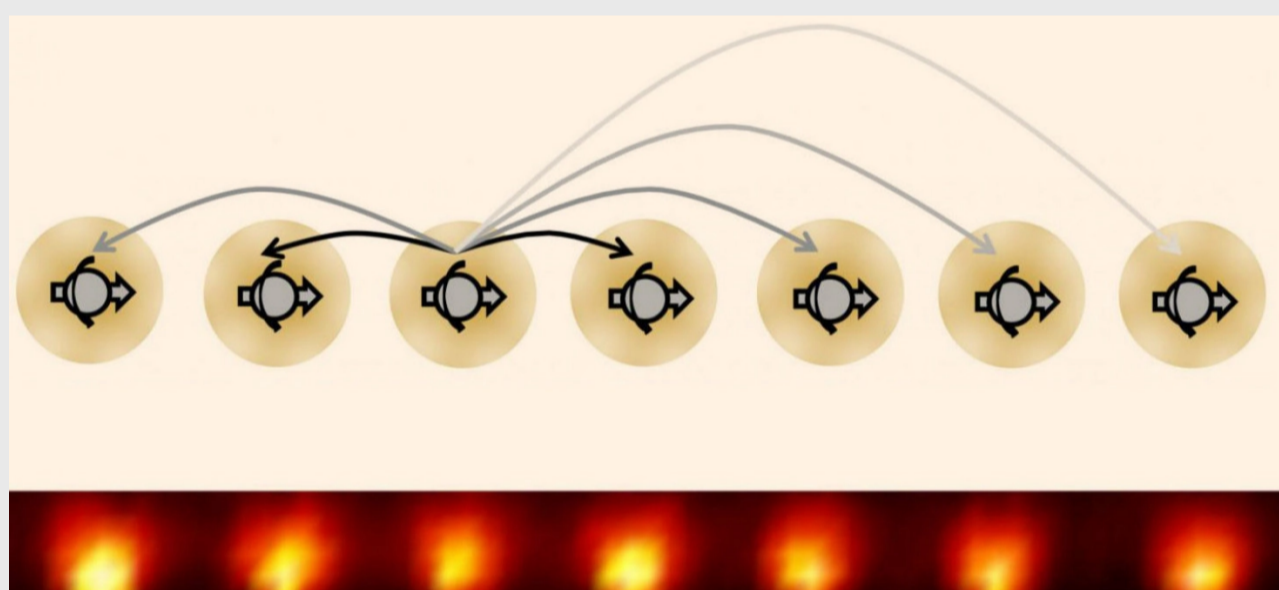
### The EV Transition Is Harder Than Anyone Thinks

Volvo Cars CEO Jim Rowan boldly proclaims that electric vehicles will reach price parity with internal-combustion-engine (ICE) vehicles by 2025. Not likely, counter Mercedes-Benz's chief technology officer Markus Schäfer and Renault Group CEO Luca de Meo. The International Energy Agency predicts...

[spectrum.ieee.org](https://spectrum.ieee.org)



## INFRASTRUCTURE



### Even with quantum entanglement, there's no faster-than-light communication

One of the most fundamental rules of physics, undisputed since Einstein first laid it out in 1905, is that no information-carrying signal of any type can travel through the Universe faster than the speed of light.

[bigthink.com](https://bigthink.com)



### Bob Metcalfe, Ethernet Pioneer, Wins Turing Award

We care about your data, and we'd like to use cookies to give you a smooth browsing experience. Please agree and read more about our privacy policy. Agree Bob Metcalfe has always been a believer in the power of networking.

[quantamagazine.org](https://quantamagazine.org)

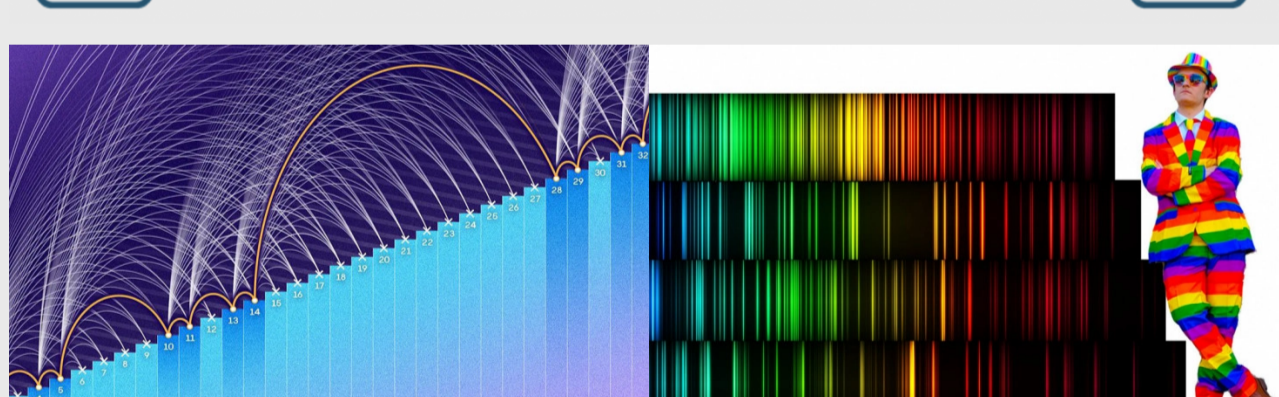
### Gordon Moore, modern computing pioneer, dies at 94

Gordon Moore, co-founder of Intel and one of the most influential minds in computing history, died on Friday at his home in Hawai'i at the age of 94. Known as one of the architects of modern electronics for his work on transistors and microprocessors, his observations on the trajectory of computing...

[popsci.com](https://popsci.com)



## IN THE LAB



### Surprise Computer Science Proof Stuns Mathematicians

We care about your data, and we'd like to use cookies to give you a smooth browsing experience. Please agree and read more about our privacy policy. Agree On Sunday, February 5, Olof Sisask and Thomas Bloom received an email containing a stunning breakthrough on the biggest unsolved problem in...

[quantamagazine.org](https://quantamagazine.org)

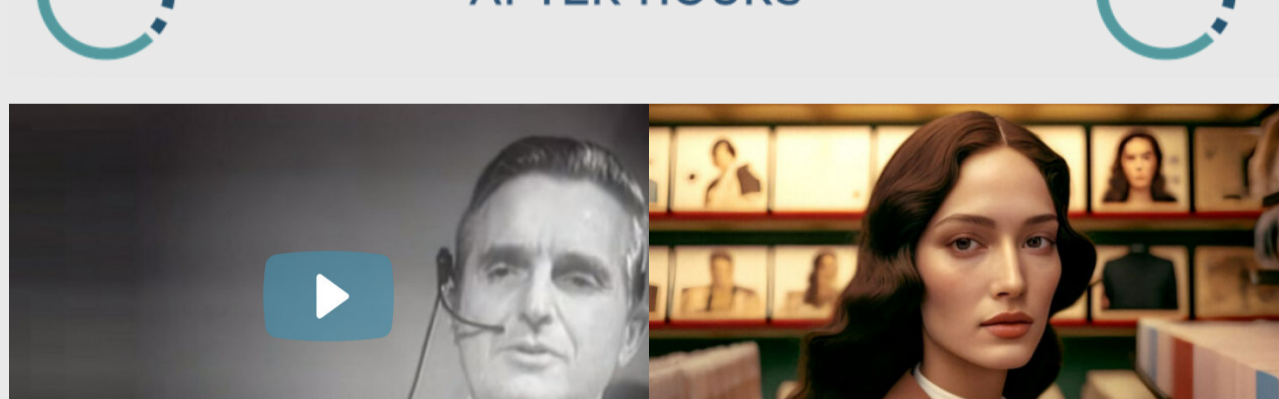
### What do the elements sound like?

In chemistry, we have He, Fe and Ca-but what about do, re and mi? Hauntingly beautiful melodies aren't the first things that come to mind when looking at the periodic table of the elements. However, using a technique called data sonification, a recent college graduate has converted the visible...

[phys.org](https://phys.org)



## AFTER HOURS



### The Mother of All Demos, presented by Douglas Engelbart (1968)

The Mother of All Demos is a name given retrospectively to Douglas Engelbart's December 9, 1968, demonstration of experimental computer technologies that are now commonplace. The live demonstration featured the introduction of the computer mouse, video conferencing, teleconferencing, hypertext...

[youtube.com](https://youtube.com)

### Artists astound with AI-generated film stills from a parallel universe

Since last year, a group of artists have been using an AI image generator called Midjourney to create still photos of films that don't exist. They call the trend "AI cinema." We spoke to one of its practitioners, Julie Wieland, and asked her about her technique, which she calls "synthography," for...

[arstechnica.com](https://arstechnica.com)



SCIENCE IS OUR BUSINESS,  
BUSINESS IS OUR SCIENCE.



[Tweet](#) [Share](#) [Forward](#) [Share](#)

LEARN FROM THE PAST.  
UNDERSTAND THE PRESENT.  
EXPLORE THE FUTURE.

AVAILABLE NOW  
Everywhere books are sold

**FC** EAST COMPANY Press

PAPERBACK, DIGITAL AND AUDIO

GRIDS CAPITAL invests in deep tech ventures. Deep Tech is where Science meets Technology.

[Click here to know more.](#)